



**TESTED: 17" POWERBOOK P.42**

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**MICRO DIGI-CAMS P.12**

Want to hide your camera in an Altoids tin? You can.

**82**  
JUN  
2003

# MacAddict

A BETTER MACHINE. A BETTER MAGAZINE.

**EXTREME TIPS INSIDE**

## OFFICIAL SECRETS REVEALED

Tips from the creators  
of Photoshop, iMovie,  
Word, Excel, and more

## SHAREWARE GONE WILD!

The 16 weirdest programs  
ever assembled—and they're  
all on this month's CD-ROM

## HOW TO:

Overdub  
Flubs in iMovie  
Share iTunes  
Across a Network  
Send Files Over  
the Internet for Free  
Trash Locked Files  
and Directories

**EXCLUSIVE!**

Tony Hawk  
Talks Tips for  
Pro Skater 3  
p.51

## SEXY & 17



We stare down 10  
top 17-inch LCDs,  
and tell you which  
ones blinked.

## REVIEWED

◀ Dual 1.42GHz Power Mac, FreeHand MX, d2 FireWire 800 drive,  
Tony Hawk's Pro Skater 3, 1GHz 17-inch iMac, Power Over Ethernet,  
Data Bank, Black & White: Creature Isle, Data Rescue, and much more....



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## **Crywolf Cool Mac Keyboard**

The wipe-clean, fully rollable take-anywhere USB keyboard — as flexible as you are!

IN10689

**\$59<sup>95</sup>**



## **Palm® Zire™ 71**

Drop-dead good looks, a built-in camera and a killer color screen.

PDA1291

**\$299<sup>95</sup>**



## **Griffin Laptop Stand**

Turn your laptop into an ergonomically-designed desktop.

AC32094

**\$39<sup>95</sup>**



## **SanDisk PhotoViewer**

Browse and share your photos on your TV, straight off your digital camera's Flash card.

VW112770

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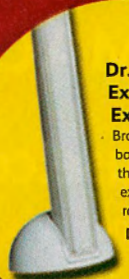


## **LaCie 400GB Hard Disk**

LaCie thought BIG when they built this drive — it delivers up to two days of digital video at 400Mbps!

DRI6455

**\$799<sup>95</sup>**



## **Dr. Bott ExtendAIR External Antenna**

Browse the Web from your backyard this summer — this external antenna extends your AirPort® range up to 250 feet!

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**\$99<sup>95</sup>**



## **Kensington USB Keyboard**

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## **Difusi Speakers**

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**\$9<sup>95</sup>**





**Griffin iTrip FM Transmitter**

The iTrip FM transmitter lets you play your iPod® through any radio.

AC32554

**\$34<sup>95</sup>**



**Matias iPod Armour**

This padded aluminum shell protects your iPod® while leaving ports accessible.

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**\$49<sup>95</sup>**



**MacAlly Mini Mouse**

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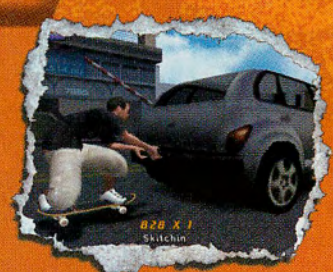
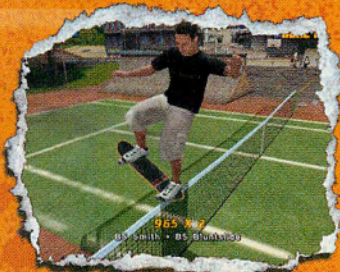


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# MacAddict

ON THE COVER  
photograph by Mark Madeo

## features

### 18 Official Secrets Revealed

We've got awesome shortcuts, super time-savers, crazy keyboard commands, and secret tips—all straight from the folks who created your favorite apps. **by Cathy Lu**

### 28 Sexy at 17

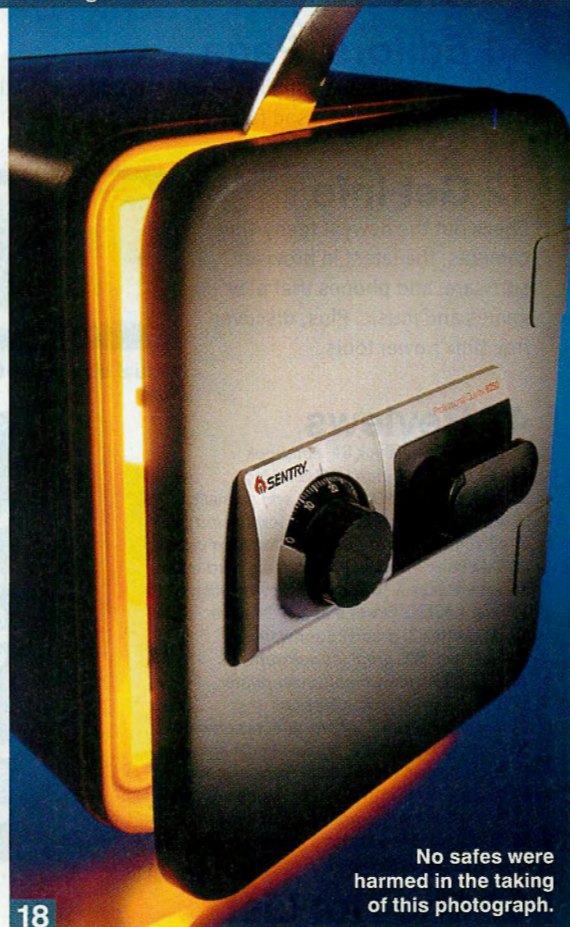


We spent weeks locked in a dark room testing the latest 17-inch LCD displays. Our favorite? Prepare to be surprised. **by Narasu Rebbapragada**

### 34 Offbeat Shareware



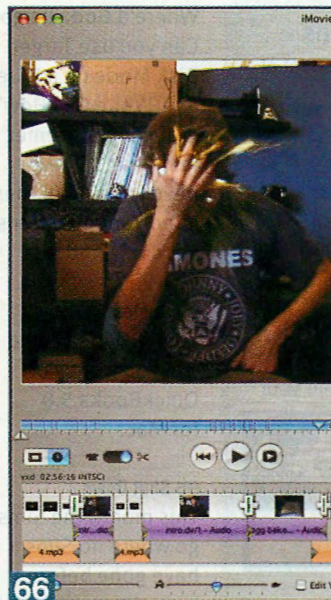
There's a world of off-the-wall software that's weird, fun, loopy—and sometimes even useful. Here's some of the best. **by Andrew Tokuda**



No safes were harmed in the taking of this photograph.

18

## how to



66

D'oh!

### 64 Ask Us

Here's expert advice for when your iSub won't mute, your screen goes black, your firewall keeps you from iChatting, and your hard drive needs to be FBI-proof.

### 66 Overdub Flubs in iMovie

You needn't preserve tawdry expletives in your home videos for posterity. Here's how to delete 'em. **by Kris Fong**

### 69 Trash Locked Files and Directories



If files or folders defy your desire to throw them away, here's how to say "Good riddance!" forcefully. **by Kris Fong**

### 70 Share iTunes Across a Network



Turn one Mac into an iTunes jukebox and serve songs across your local network. We show you how. **by Kris Fong**



72

### 72 FTP for Free

Looking for a way to transfer files on the cheap? No problemo, amigo: FTP is free in Mac OS X. **by Mary E. Tyler**



# every month

## 10 Editors' Page

Our editor admits his fallibility—well, stupidity, actually—and bids both a fond and a sad farewell.

## 12 Get Info

Check out the newest teeny-tiny cameras, the latest in browser software, and phones that play games and music. Plus, discover free Unix power tools.



Actual size (c.2010).

## 41 Reviews

42 17-Inch PowerBook G4 *notebook*  
46 1GHz iMac 17-inch LCD G4 *iMac*  
58 Amorphium 3 *3D graphics and animation*  
59 Black & White: Creature Isle *expansion pack*  
47 d2 200GB *FireWire 800 desktop hard drive*  
61 Data Bank *FireWire 400 portable hard drive*  
54 Data Rescue X 10.2 *data-recovery utility*  
44 Dual 1.42GHz Power Mac G4 *G4 tower*  
56 Expression 3 *graphics software*  
49 FreeHand MX *graphics software*  
48 HL-5070N *networkable laser printer*  
57 iD2Q *QuarkXPress XTension*  
53 MovingPicture 4.0 *photo-effects software*  
53 Photo to Movie 1.1.3 *photo-effects software*  
61 PocketMouse Pro Wireless *optical mouse*  
61 Power Over Ethernet *AirPort extension cord*  
52 Puppy Suite *fingerprint-password system*  
50 Tony Hawk's Pro Skater 3 *skateboarding game*  
60 VTrack 1.5 *video editor*



## 62 The Hot List

The best of the best from recent reviews. If the editors of MacAddict went shopping, this is what they'd buy.

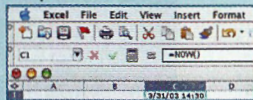
## QUICK TIPS FROM THIS MONTH'S ISSUE

### ➔ WIPE YOUR DRIVE CLEAN

To really, truly erase your hard drive, select the Erase tab in Apple's Disc Utility, click the Options button, then check the Zero All Data option. **From Ask Us, p64**

### ➔ AUTOMATE THE TIME AND DATE

To set up an Excel spreadsheet so that it updates the time and date each time you open it, enter =now() in your chosen cell. **From "Official Secrets Revealed," p18**



### ➔ CLEAN UP TOAST

To delete all the files you've dragged into Toast—regardless of what windows they may be in—press Command-Option-Control-Delete. **From "Official Secrets Revealed," p18**

### ➔ CREATE MULTIPLE PHOTOS

In Photoshop, you can create a sheet of repeating pictures by going to File > Automate > Picture Package and selecting one of many layouts. **From "Official Secrets Revealed," p18**



### ➔ MAKE KEN BURNS REDUNDANT

Apple's iMovie isn't the only way to get that cool pan-and-zoom effect into your home movies. Here are two alternatives: MovingPicture and Photo to Movie. **From Reviews, p53**



Mirror, mirror on the door,  
which is the fastest Mac G4?



45



## 94 Log Out

### 94 Letters

Where'd Godzilla go? Can you use Target Disk Mode on a Blue-and-White G3? How'd that contest winner really win? Do we have ESP? All of these important questions get answered.

### 95 Contest

Your IPO idea could win you a copy of QuickBooks 5.0 for Mac.

### 96 Shut Down

This month the Sims go where no Sims have gone before. Hard times and celeb TV are in the house.



We're holding out for a  
FireWire 800 pterodactyl



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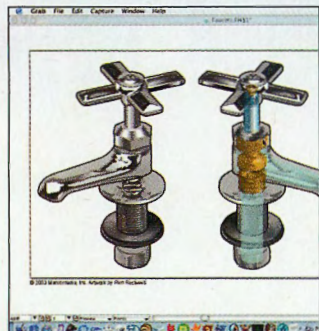
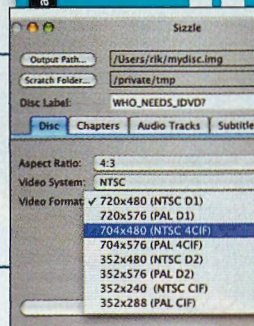
# the disc

## 100+ Apps!

This month's Disc is stuffed to its shiny polycarbonate gills with over a hundred ways to get more out of your Mac.

### Sizzle 0.1

Your Mac doesn't have an internal SuperDrive, so you can't burn DVDs, right? Wrong. With Sizzle and a DVD-R drive, you can.



### FreeHand MX trial

Here's your chance to check out one of the world's top drawing apps without laying down big bucks.

## on the Disc

### AUDIO & MUSIC

AACelerator 1.0  
AudioBookMaker 2.0  
AWS Guitar Tuner 1.1  
Beast 1.01 demo  
ChordBook 2.6  
ChordBook (OS X) 2.6c  
Claw 1.0  
Clutter 1.0d8  
DeKstasy 1.2  
iHam on iRye 2.0  
iNet Stream Archiver 1.6.3  
iSpeak It 1.1  
JunoX2 1.51 demo  
MakingMusic 1.3  
MidiFork 1.0  
MP3 Dock 1.0  
MP3 Sushi 1.4.1  
netTunes 1.2  
Ringtone Converter 4.2.1  
Ringtone Converter X 4.2.1  
SimpleSynth 0.7  
Slayer 1.51 demo  
Spongefork 2.3  
Voice Box 1.3.1

### DEVELOPMENT

Aqua Data Studio 2.0.7  
Konfabulator 1.0.2  
ProjectHQ 1.1  
REALbasic Classic 5 demo  
REALbasic OS X 5 demo

### FUN & GAMES

amju 1.1  
BarWare Deluxe 2.5  
BarWare Deluxe X 2.5

Drip Drop 1.1  
EarthDesk 1.2.6  
eSanta 1.0  
Fish Bubbles 1.0  
Frenchdlet 1.0.2  
Frenchdlet X 1.0.2  
GolfMeister 3.5.2  
iConquer 2.0.1  
Jared 1.0  
Jared X 1.0.1  
Pocket Tanks 1.00b  
Racer 0.5  
Snap 1.2  
Tank Fighters 1.0.3  
Taxpayers' Millions 1.1  
Tony Hawk 3 gameplay movie  
xGates 1.3

### GRAPHICS & MULTIMEDIA

Amorphium 3.1 demo  
Border 1.1b1  
Expression 3 tryout  
FreeHand MX trial  
ID2Q 1.1r3 demo  
iScreensaver Designer 3.0.1  
MediaEdit 1.5.4  
Mike's Edge 1.1.1  
MorphX 2.5.3  
MovingPicture 4 trial  
MovingPicture (OS X) 4  
plug-ins trial  
myPhoto 1.1  
Paintfx 1.2  
Photo to Movie 1.1.5  
PixRecorder (Classic) 2.0  
Quickie Web Albums 3.0.1  
Quickie Web Albums X 3.0.1  
Sizzle 0.1  
Tint 1.2.1  
VTrack 1.5 demo

### INTERFACE

DockExtender 3.0.4  
Ephemer 1.0  
Fluid 2.0.3  
Fracture 1.1.1  
Launch Items X 1.4.3  
LiSA 2.4  
LiSA X 2.4.1  
QuickClick 1.0  
VirtualDesktop 2.1.6  
Visage 1.2.4  
Xkeys 1.0.1

### INTERNET & COMMUNICATION

Fetch 4.0.3  
Internet Explorer X 5.2.2  
OmniWeb 4.1.1 trial  
Opera 6.0  
Safari Xtra 3.4  
Transmit (Classic) 1.7  
Transmit X 2.3

### PRODUCTIVITY

Coffee Break Pro 2.1.2  
Coffee Break Pro X 2.1.2  
iFlash 1.1a  
Labor Day 1.0  
Muscle 1.6  
NovaMind 1.4.2  
Register 1.0  
Slacker 2.0.2  
Tex-Edit Plus 4.5

### UTILITIES

ContentBarrier 1.3.3 demo  
ContentBarrier X 10.0.1 demo  
Data Rescue X 10.2 demo  
DiskTracker 2.2.2  
DiskTracker (OS X) 2.2.2  
HomeRun 1.3.1  
InVisibles 1.4  
NetBarrier 2.2 demo  
NetBarrier X 10.1 demo  
NetShred (Classic) 2.0  
NetShred X 3.1  
PdfCompress 4.0.2  
PersonalBackup X 10.1 demo  
SafeShred 2.1.2  
ScreenRecord 1.4  
Sony Ericsson Clicker 1.5  
Sync Entourage-Address Book 1.2.6  
Trash It 3.02  
VirusBarrier 1.6.2 demo  
VirusBarrier X 10.0.1 demo

### SPONSORS

DriveSavers: Lost Data video  
promo  
Intego: ContentBarrier X 10.0.1 demo  
Intego: NetBarrier X 10.1 demo  
Intego: PersonalBackup X 10.1 demo  
Intego: VirusBarrier X 10.0.1 demo  
REAL Software: REALbasic Classic 5 demo  
REAL Software: REALbasic OS X 5 demo

# MacAddict

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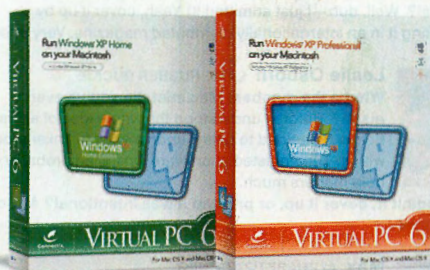
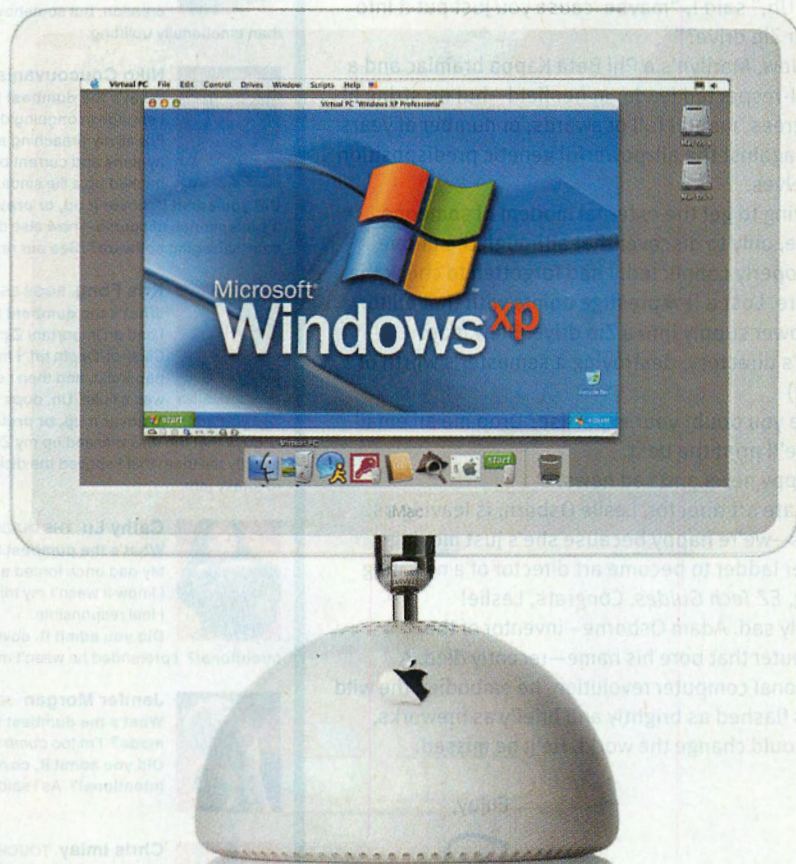
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# D'oh!

Even smart people make dumb moves.



You've done it. Probably more than once.

And what is *it*?

Making an incredibly boneheaded mistake when working with your Mac.

Just yesterday, my wife called me downstairs to her office and asked, "Rik, why won't this floppy mount on my desktop?"

"Uh," said I, "maybe 'cause you just put it into your Zip drive?"

Now, Marilyn's a Phi Beta Kappa brainiac and a well-respected leader in her field—but no string of degrees, mantel full of awards, or number of years

of Mac experience can defend against the all-powerful genetic predisposition we have to make fools of ourselves.

Once I spent half an hour trying to get the external modem of someone on my staff to detect a dial tone, only to discover that although the phone jack and power supply were properly connected, I had forgotten to check the serial cable—which wasn't there. Lost a few prestige points with that editor.

Once I plugged the wrong power supply into a Zip drive. Blew it up.

Once I trashed my daughter's directory, destroying a semester's worth of work. (*Thank you, DiskWarrior!*)

What've you done that made you doubt your expertise? Drop me an email at [letters@macaddict.com](mailto:letters@macaddict.com)—we'll print the best.

On another note, I've got happy news and sad news.

The happy news: Our associate art director, Leslie Osborn, is leaving us. No, we're not insensitive boors—we're happy because she's just moving down the hall and up the career ladder to become art director of a new mag our parent company is starting, *EZ Tech Guides*. Congrats, Leslie!

The sad news, though, is truly sad. Adam Osborne—inventor of the groundbreaking portable computer that bore his name—recently died. A flamboyant pioneer of the personal computer revolution, he embodied the wild 'n' crazy days when companies flashed as brightly and briefly as fireworks, and one guy with a great idea could change the world. He'll be missed.

Enjoy,

Rik

## from the editor's desktop

### WHERE TO LEARN MORE ABOUT HOW IT ALL STARTED

In honor of Adam Osborne, here's a collection of Web sites that detail the early days of the personal computer revolution. Yes, the first commercially available PC really did ship with 256 bytes—that's not a misprint—of RAM.

#### Old-Computers.com

[www.old-computers.com](http://www.old-computers.com)  
A fabulous collection of info about many of the computers that started it all, including Adam's Osborne I.

#### An Interview with Lee Felsenstein

<http://opencollector.org/history/homebrew/engv3n1.html>  
Osborne's lead engineer talks about the very early days, including why 2001's HAL sang "Daisy" as it was being lobotomized. Warning: extremely geekitudinous.

#### DigitalDataPorn

[www.lindkvist.com/digitaldataporn](http://www.lindkvist.com/digitaldataporn)  
No, it's not what you think—it's a collection of 401 of the geekiest early-days images you could ever hope to find in one place.

#### History of the Microcomputer 1973–1986

[www.larrysworld.com/articles/historypc.htm](http://www.larrysworld.com/articles/historypc.htm)  
A concise history of the early years, with info on Ed Roberts, George Morrow, John Draper, and other pioneers—including some guy named Gates.

## STAFF RANTS

**Q1:** What's the dumbest Mac mistake you've ever made?

**Q2:** Did you admit it, cover it up, or pretend it was intentional?



**Narasu Rebbapragada** ARTFUL DODGER

**What's the dumbest Mac mistake you've ever made?** I stepped on and broke a video card I was about to install.  
**Did you admit it, cover it up, or pretend it was intentional?** I tried to turn it into a mixed-media art creation, but somehow its aesthetics were a bit less than emotionally uplifting.



**Niko Coucouvanis** THE ONLY NORMAL PERSON HERE

**What's the dumbest Mac mistake you've ever made?** I engage in ongoing dumbness: I don't back up my files. For all my preaching about maintaining proper disk hygiene and current backups, I haven't intentionally backed up a file since, oh, about 1995.

**Did you admit it, cover it up, or pretend it was intentional?**

It's intentional, of course—how else do you suggest I evaluate data-salvaging software? (See our review of Data Rescue, p54.)



**Kris Fong** EGGS ESSENTIALIST

**What's the dumbest Mac mistake you've ever made?** I had an important Zip disk that launched into a hard-core Click-of-Death riff. I managed to spit the disk out with a paperclip, and then I stupidly put it back in, hoping that it was a fluke. Uh, oops.

**Did you admit it, cover it up, or pretend it was intentional?** I told our IT guys that the disk messed up my Zip drive—which it did—but I didn't exactly tell them that I shoved the disk back in and that caused the thing to totally jam.



**Cathy Lu** THE QUICKER FIXER-UPPER

**What's the dumbest Mac mistake you've ever made?** My dad once forced a USB cable into a serial port. I know it wasn't my mistake, but since I'm related to him, I feel responsible.

**Did you admit it, cover it up, or pretend it was intentional?** I pretended he wasn't my dad. Of course.



**Jenifer Morgan** JEN THE OBSCURE

**What's the dumbest Mac mistake you've ever made?** I'm too dumb to tell you.

**Did you admit it, cover it up, or pretend it was intentional?** As I said, it's hard for me to say.



**Chris Imlay** TOUCHY ARTSY GUY

**What's the dumbest Mac mistake you've ever made?** Installing 10.2.4 before discovering its automatic date-changing powers. It is now 4:01 p.m., December 31, 1969—I'm now less than one year old!

**Did you admit it, cover it up, or pretend it was intentional?** Well, duh—I just admitted it! Yeah, cover it up by

broadcasting it in an internationally distributed magazine. Very effective.



**Leslie Osborn** LAME RUBBER DUCKIE

**What's the dumbest Mac mistake you've ever made?** Before I understood the whole idea of a System Folder, I decided to take it upon myself to tinker around with it. The untested shareware I installed probably didn't help matters much.

**Did you admit it, cover it up, or pretend it was intentional?** Me, do wrong? Nevah!



**Max** ALPHABETIZATIONIST

**What's the dumbest Mac mistake you've ever made?** Plugging a DVI—AGP?—LCD into a PCI (not AGP) VGA card. OMG!

**Did you admit it, cover it up, or pretend it was intentional?** Total CYA.



It's a lot easier to take on an army



when you *are* one.

# DUNGEON SIEGE™

A ROLE-PLAYING GAME FROM CHRIS TAYLOR

Assemble and control a party of up to eight heroes at a time, as you battle your way through the seamless and expansive 3D world of Ehb. From warriors and archers to wizards, and even pack mules to carry your treasure, you and your party will wreak vengeance on an ancient evil. Whether you're playing alone or in multiplayer mode, victory is within your grasp. Let the battles begin.



[www.macsoftgames.com](http://www.macsoftgames.com)



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MacSoft



# THE INCREDIBLE SHRINKING CAMERA

## New Digital Cameras Are Smaller Than Ever



Is it possible that cameras are getting too small?

PHOTOGRAPH COURTESY OF LEICA

Remember the air of novelty that used to surround small-sized digital cameras like Canon's original Digital Elph? Size comparisons to wallets and shirt pockets abounded and gave skeptical film-camera users just one more reason to consider abandoning their 35mm rolls and leather-bound photo albums for Compact Flash cards and iPhoto.

### People aren't wowed by the compact size of digital cameras anymore—they expect it.

Now, however, small is the default. With 21 percent of U.S. households owning a digital camera and the volume of digital camera sales expected to exceed that of film cameras in 2003 (according to the Photo Marketing

Association), people aren't wowed anymore by the compact size of digital cameras—they expect it. In response, manufacturers are exceeding these expectations with some of the smallest cameras ever.

German camera maker Leica, best known for high-end professional cameras and lenses, is releasing the Minox DCC Leica M3 2.1 (pictured above; \$389,

[www.leica-camera.com/usa](http://www.leica-camera.com/usa)). With a 2.1-megapixel CMOS sensor, the retro-styled black camera body is styled after that of the 1950s-era Leica M3. And at 2.5 inches wide by 2.5 inches high, it's about the size

of a standard pad of Post-It Notes (see "It's All Relative," p13). With no zoom or manual settings, this camera is purely a point-and-shoot affair. This old-school beauty should be available by the time you read this.

Similarly, Pentax is marketing its 3.2-megapixel Optio S (\$425, [www.pentax.com](http://www.pentax.com)) as the camera that fits in a tin of Altoids breath mints. This camera is slightly upmarket compared to the Leica camera, with a 3x optical zoom (4x digital), macro mode, shooting modes (landscape, sunset, and so forth), and some manual controls. It should also be available by the time you read this.

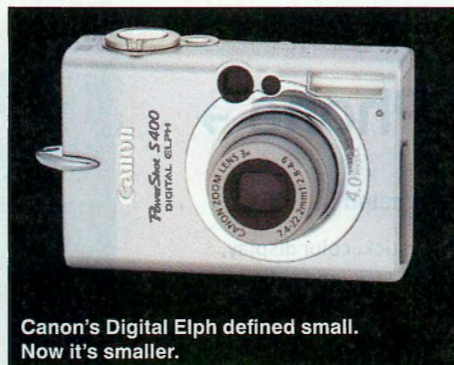
Even Canon, the de facto instigator of the small-body revolution, found a way to shave a little girth off its high-profile Digital Elph.



[fact] THE NUMBER OF RECOGNIZED FLORIDA VOTERS WHO PREVENTED THE NEWEST MEMBER OF APPLE'S BOARD OF DIRECTORS FROM GETTING A REALLY, REALLY GOOD JOB IN 2000.



The Pentax Optio S fits in a tin of Altoids.



Canon's Digital Elph defined small. Now it's smaller.

Canon's new 4-megapixel PowerShot S400 Digital Elph (\$599, [www.usa.canon.com](http://www.usa.canon.com)) is about 0.3 inch thinner and shorter than the previous 2.1-megapixel PowerShot S330 Digital Elph. Canon also increased the digital zoom, decreased the macro mode distance, and increased the duration of the movie clip you can shoot. The PowerShot S400 should be available by the time you read this.

At less than 1/2 inch thick, the thinnest camera in the lot is Casio's new 3.2-megapixel Exilim Ex-S3 (\$349.99, [www.casio.com](http://www.casio.com)). About the size and proportion of a credit card (minus the bulbous viewfinder on the corner), the Ex-S3 sports a 4x digital zoom and is otherwise primarily point-and-shoot. It comes with 15 scene modes, including a coupling shot that lets you and a friend take each other's picture and appear within the same photo.

There are two groups of people these tiny

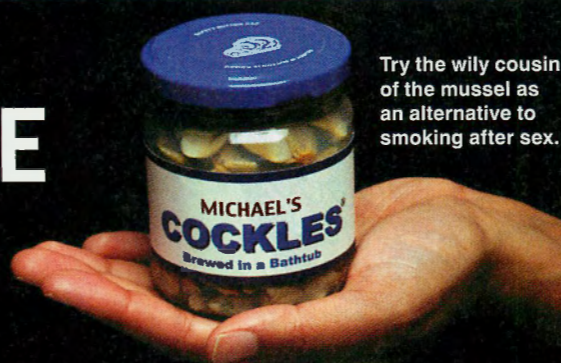


The Casio Ex-S3 is about credit-card sized.

devices won't appeal to: serious photographers (these cameras are primarily for hobbyists who rely on presets and scene modes) and people with big fingers (the little buttons can be hard to push accurately). For others who want a stylish point-and-shoot, though, these cameras give you a final reason to ditch film altogether.—Narasu Rebbapragada

## IT'S ALL RELATIVE

Digital Camera Sizes Explained in Everyday Terms



Try the wily cousin of the mussel as an alternative to smoking after sex.

Product Name	Variety-Pack Cereal Box	Casio's Exilim Ex-S3	Canon's PowerShot S400 Digital Elph	Pentax Optio S	Jar of Cockles (pictured)	Credit Card	Baseball	Minox CDD Leica M3 2.1
Dimensions in inches	4 by 2.75 by 1.5	3.52 by 2.24 by .46	3.4 by 2.2 by 1.1	3.3 by 2.0 by 0.8	3.25 by 2.5	3.125 by 2.125 by .04	2.9045 (average diameter)	2.5 by 2 by 1.7

PHOTOGRAPH BY MARK MADEO

## NEW STUFF

### 250GB FIREWIRE 800 DRIVE

EZQuest Cobra+ FireWire 800

Price TBD,

[www.ezq.com](http://www.ezq.com)

Available: June

2003

Add this 7,200-rpm hard disk to the list of FireWire 800 drives you can *almost* get your hands on.



EZQuest adds to the growing list of new FireWire 800 drive offerings.

### QUARKXPRESS 6

Price TBD, [www.quark.com](http://www.quark.com)

Available: Summer 2003 (maybe)

Quark is working on QuarkXPress 6 with multiple undos and full-resolution previews. This latest rev is supposed to have the fabled Mac OS X support we keep hearing so much about. No word yet on when version 6 will ship, but the rumor mills say possibly this summer.

### RAW-IMAGE VIEWERS

Adobe Photoshop Raw Plug-in \$99, [www.adobe.com/products/photoshop/cameraraw.html](http://www.adobe.com/products/photoshop/cameraraw.html)

Available: Now

Lightbox

\$25, [www.lightboxsoftware.com](http://www.lightboxsoftware.com)

Available: Now

These two new apps, a Photoshop plug-in and a piece of shareware, let you view and convert digital photos in your camera's raw photo format. The raw file contains all the image and meta data captured by your camera's CCD, and is the digital equivalent of a film negative. Lightbox supports the raw formats of most major camera manufacturers, and Adobe supports Canon, Fujifilm, Minolta, Nikon, and Olympus cameras.

### PERSONAL LASER PRINTER

HP LaserJet 1300

\$399 (USB) and \$599 (with Ethernet adapter), [www.hp.com](http://www.hp.com)

Available: Now

According to an HP, the new LaserJet 1300 prints a full 20 pages per minute even at 1,200 dpi, and spits out the first page in a mere 8 seconds. It includes PostScript Level 2 (emulated), 16MB of RAM, and a 250-sheet paper tray. Options include Bluetooth (\$129) and 802.11b (\$299) wireless adapters.



## DROOLWORTHY

Sexy Stuff We Can't Wait to Get Our Mitts On

### The Gaming Phone →

Sony Ericsson T310 •  
www.sonyericsson.com • \$99 estimated

This gamer's delight comes with a joystick, color display, 32 game sounds, vibrating force feedback, and a digital-camera attachment. The triband GSM phone operates at the 800MHz, 1,800MHz, and 1,900MHz frequencies. In Europe, Asia, and Latin America, the phone comes bundled with Tony Hawk's Pro Skater 4. In the United States, only AT&T subscribers get Pro Skater (for a nominal fee), but U.S. carriers will offer about 60 other games.—NR

Now when your mom  
says to go outside and play,  
you won't argue.

### The Music Phone ↓

Nokia 3300 • www.nokiausa.com •  
\$200 to \$300 estimated

This summer, check out the Nokia 3300: a combination MP3 player, FM stereo radio, and phone (GSM 850MHz and 1,900MHz frequencies) with keyboard. You can't use the phone's USB port to download music from your Mac; however, Nokia told us that you can copy your MP3 files onto an MMC card with a card reader, insert that card into the phone, and play the music just fine.—NR

This Nokia MP3  
phone brings new  
meaning to the  
term *hold music*.



PHOTOGRAPH COURTESY OF SONY ERICSSON

PHOTOGRAPH COURTESY OF NOKIA



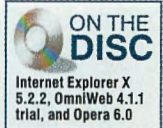
## MAC OS X

# BROWSER BRAWL

## Internet Surfing Options

The browser brawl is back, providing a startling array of choices for the coveted Default position in your Internet system preferences dialog. To help you sort through the hope and the hype, we compiled the following chart based on our own hands-on tests loading NBA.com (one dang complex page).

Be aware that—thanks to open-source program design—by the time you read this, features will have been added and new revs posted.—Robert Capps



	Camino (formerly Chimera)	iCab	Internet Explorer	Mozilla	Navigator	OmniWeb	Opera	Safari
Company, URL, and Price	Mozilla Project, <a href="http://www.mozilla.org">www.mozilla.org</a> , free	iCab, <a href="http://www.icab.de">www.icab.de</a> , free (\$29 for iCab Pro)	Microsoft, <a href="http://www.microsoft.com/mac">www.microsoft.com/mac</a> , free	Mozilla Project, <a href="http://www.mozilla.org">www.mozilla.org</a> , free	Netscape, <a href="http://channels.netscape.com/ns/browsers">http://channels.netscape.com/ns/browsers</a> , free	The Omni Group, <a href="http://www.omnigroup.com">www.omnigroup.com</a> , \$29.95 (free trial)	Opera Software, <a href="http://www.opera.com">www.opera.com</a> , \$39 (free ad-sponsored version)	Apple, <a href="http://www.apple.com">www.apple.com</a> , free
Current Version	0.7 beta	2.9.1 (partial release)	5.2.2	1.3	7.0.2	4.1.1	6.0	public beta 2
Mac OS 9 or Earlier	No	Yes	Yes	Yes	Yes	No	Yes	No
Site Launch Time (in Seconds on Dual 1GHz G4)	7	13	10	7	22	8	8	10
Surfing Speed Within Site	Fast	Slow	Slow	Fast	Fast	Moderate	Moderate	Fast
Modern Standards Supported	HTML 4, XML, CSS 1, CSS 2, DOM	HTML 4, DOM	HTML 4, XML, CSS 1, CSS 2, DOM	HTML 4, XML, CSS 1, CSS 2, DOM	HTML 4, XML, CSS 1, CSS 2, DOM	HTML 4, CSS 1	HTML 4, XML, CSS 1, CSS 2	HTML 4, XML, CSS 1, CSS 2, DOM
Tabbed Browsing (Multiple Pages in One Browser Window)	Yes	No	No	Yes	Yes	No	No	Yes
Includes Mail and News Clients	No	No	No	Yes	Yes	No	No	No
Embedded Web Search Tool	No	No	No	No	No	No	Yes	Yes
Can emulate Netscape or Internet Explorer	Yes	Yes	Yes	Yes	Yes	Yes	Yes	No
What's Unique?	Uses the advanced Mozilla Gecko HTML engine but is specifically designed for Mac OS X.	Special full-screen Kiosk Mode for keeping lists of links in a separate tab.	Auction manager; Scrapbook for offline surfing; most widely used and supported.	Evolving browser with advanced HTML-rendering engine.	Netscape's good reputation; most stable Mozilla Gecko-based browser.	Autoupdating bookmark feature; spelling checker for filling out Web forms.	Quick Preferences adjust preferences on the fly; lots of handy shortcut-key commands.	Snap Back button returns to surfing origins; best bookmark management.

## AND THE WINNER IS:

### FIRST CHOICE: CAMINO

Camino is a lean, fast, smart browser based on the Mozilla Gecko engine and customized for Mac OS X.

### RUNNER-UP: SAFARI

Right now it's hard to online bank with Safari. Once Safari can emulate Netscape or IE, or becomes widely supported by online institutions, it will almost surely kick Camino's lean, fast, and smart ass.

## SHAREWARE PICK OF THE MONTH

### KONFABULATOR

Arlo Rose and Perry Clarke • [www.konfabulator.com](http://www.konfabulator.com) • \$25

Now you can check out hundreds of news tickers, clocks, eBay watchers, and games, thanks to Konfabulator—a JavaScript run-time engine that lets you run all kinds of widgets on your desktop. With Quartz rendering, widgets can take advantage of 32-bit transparency and animated fades, so the apps look good. As of press time, Konfabulator's Web site hosts 172 free downloadable widgets, but it won't be long before you're using the easy-to-learn JavaScript scripting language to make your own contributions to Konfabulator's growing developer community.—Andrew Tokuda



Konfabulator brings the wonderful world of widgets to the Mac.



# GAME NEWS



Make it so, punk.

## BEAM ONBOARD STAR TREK: ELITE FORCE II

Phasers on Stun, Maximum Setting

Welcome back to the *Star Trek* universe, first-person-shooter style. More than two years after the release of *Star Trek Voyager: Elite Force*, it's time to suit up for *Star Trek: Elite Force II* with more weapons, gameplay, and alien races than you can shake a Klingon Bat-Leth at. As Alex Munro, you command special operations for the Elite Force Hazard Team. You'll encounter new and old *Star Trek* races, away missions on hostile planets, starships, and the U.S.S. Enterprise—where Captain Picard and Tuvok might even fight by your side. *Elite Force II* uses a tweaked *Quake III* engine with multiplayer options for deathmatch and capture the flag. Still early in development, *Elite*

**Star Trek: Elite Force II**  
Aspyr  
[www.aspyr.com](http://www.aspyr.com)  
Price TBD  
Available: 2003



Star Trek: Elite Force II on ice.



This first-person shooter isn't just for Trekkers.

*Force II* will be available later this year to delight Trekkers and non-Trekkers alike.—Matt Osborn



Play *Sim City 4* and show Giuliani how it's really done.

## SIM CITY'S BACK. START BUILDING.

Be a God *and* a Mayor—What Could Go Wrong?

The ultimate God-game series—one with a 14-year gaming legacy—returns to the Mac, and the rules have changed. In *Sim City 4*, you begin the game as God, sculpting the land, planting trees, and creating animals. Next, you put on your mayor's hat and let the urban planning begin. In the midst of awesome visuals, detailed models, special effects, and superclose zooming, your goal in this game isn't to increase real-estate value—it's to serve the populace, keeping them happy and growing. After you've gained their trust, you can flip to God mode and raise some hell with volcanoes, meteors, and other forms of destruction. Isn't urban planning fun?—MO

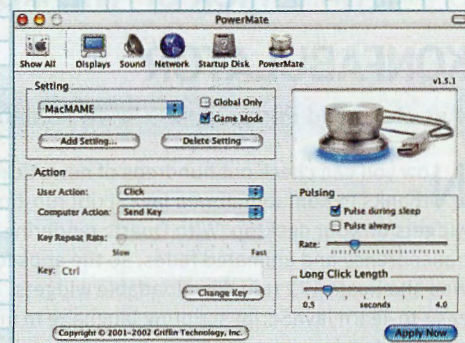
**Sim City 4**  
Aspyr  
[www.aspyr.com](http://www.aspyr.com)  
\$49.95  
Available: Q2 2003

## ATARI PADDLES FOR THE MAC

Try Griffin Technology's PowerMate

Do you yearn for the feel of classic Atari games like *Video Olympics* or *Pong*? Got a Griffin Technology PowerMate (\$45, [www.griffintechology.com](http://www.griffintechology.com))? This knoblike USB device for adjusting volume or scrolling through video also does a killer job of controlling old-school games. Load up the PowerMate's software, create a setting in the PowerMate system preferences for the game you're playing, and test your controls. The PowerMate works with emulators such as MacMAME, and games that support customizable hot keys.—MO

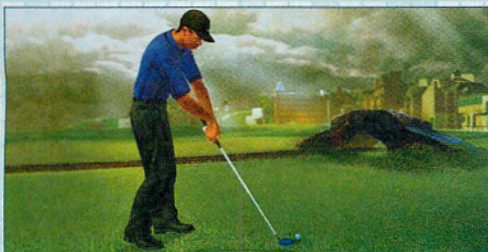
Use your PowerMate as a game controller.





## TIGER WOODS PGA TOUR 2003

Get Teed Off Like Tiger Woods



Landscapes and weather conditions in Tiger Woods PGA Tour 2003 look be-yoo-ti-ful.

Birds chirping in the trees, the splash of your ball in a water trap, and pro golfers David Feherty and Bill

Macatee commenting on your every move: You are Tiger Woods and this is the PGA Tour. Play 12 courses, including Pebble Beach, Spyglass Hill, and St Andrews (new to the 2003 version of the game). Check out game modes like Play Golf and Skills Competition—or try Career mode, where you take Tiger on the road, buy equipment, take lessons, and even create your own golfer, whom you control. As of press time, we could not confirm the inclusion of an online play component, which may be a pay-to-play service. —MO

Tiger Woods PGA Tour 2003  
Aspyr  
www.aspyr.com  
\$49.95  
Available: Q2 2003



C'mon, you can take Tiger.



Feel the raw, unbridled emotion that is...golf.

# OPEN-SOURCE WEB TOOLS

Manage Your Site Like the Pros Do...for Free

Mac OS X users have access to many of the same tools Unix professionals use for maintaining large, commercial Web sites. Check out these open-source apps for managing and developing your own site.—Michael Luton

## rsync

www.rsync.org

### What Is It?

Rsync is a command-line tool commonly used to transfer entire directory trees from one server to another.

### Why Is It Cool?

Rsync compares the source and destination files and transfers only the parts of the files that have changed. With rsync you can maintain a local test server and update a remote production server without using an FTP client like Fetch to manually transfer files.

## CVS (concurrent versions system)

www.cvshome.org

### What Is It?

CVS lets you store the source-code files for a project in a central location. Individual users can check out a copy of the project files and then check in their changes periodically.

### Why Is It Cool?

Project team members can freely edit any file without worrying about overwriting someone else's changes. CVS merges the differences between two copies of the file.

## phpMyAdmin

www.phpmyadmin.net

### What Is It?

phpMyAdmin is a hugely popular GUI interface for MySQL, a relational database package included with Mac OS X.

### Why Is It Cool?

phpMyAdmin simplifies MySQL database administration by handling the heavy SQL work. The nifty point-and-click Web interface generates the necessary SQL commands behind the scenes and feeds them to MySQL.

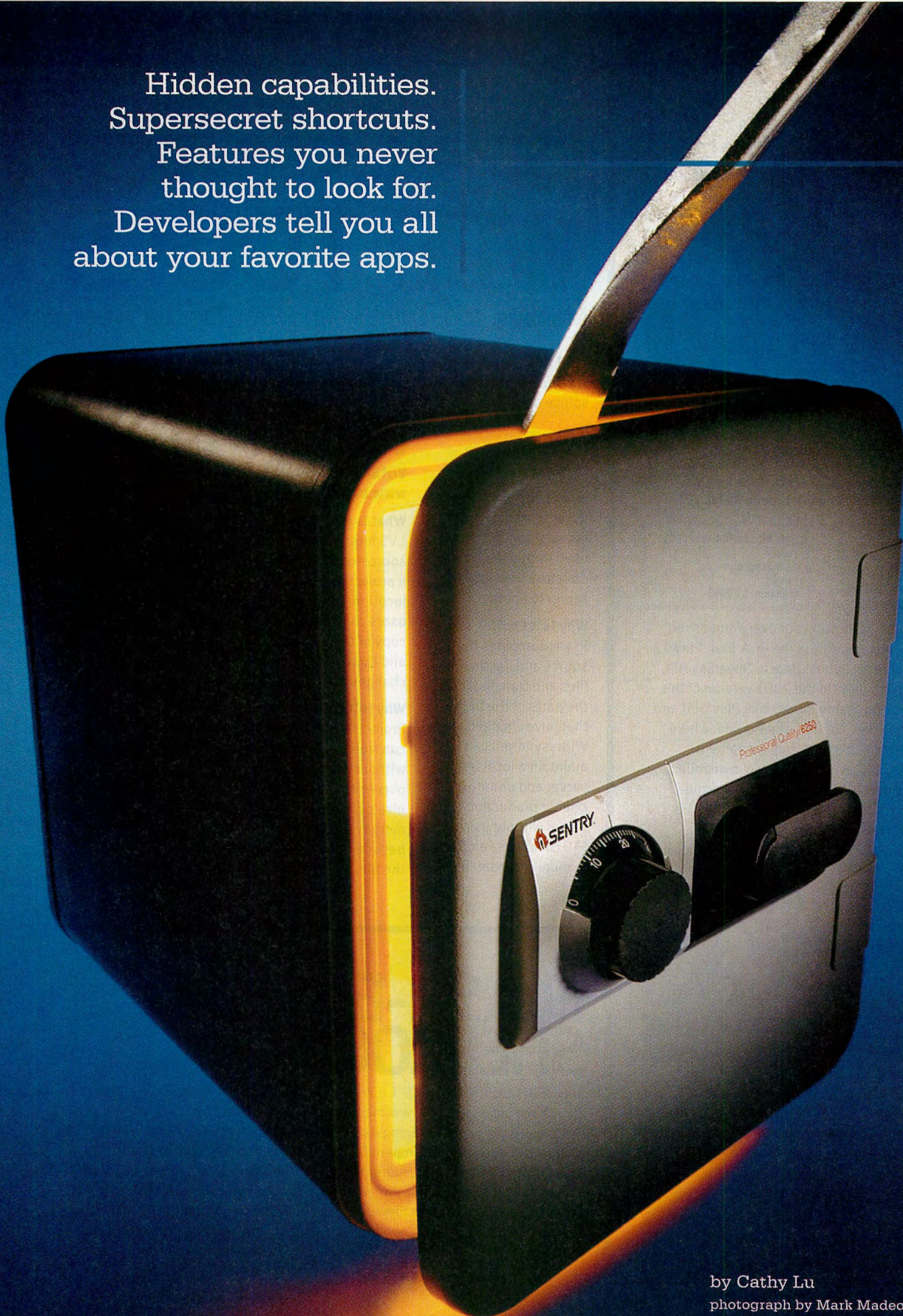
# FLASH-BASED SHERLOCK?

Macromedia Unveils Dev Tool for Internet Apps

Macromedia Central (www.macromedia.com) is Macromedia's latest application for leveraging its popular Flash multimedia development tool. An application environment for creating Flash-based miniapplications, Macromedia Central creates Internet content finders similar to Apple's Sherlock channels—for example, eBay price checkers and movie timetables. Why go Central over Sherlock? Macromedia says Central apps automatically download and update data when you're on the Internet, so you can use them offline as well. Macromedia Central will be available this summer.



Hidden capabilities.  
Supersecret shortcuts.  
Features you never  
thought to look for.  
Developers tell you all  
about your favorite apps.



by Cathy Lu  
photograph by Mark Madeo



# Official Secrets REVEALED

If you think you know all there is to know about **Photoshop**, **Toast**, **iMovie**, **Word**, **Excel**, and **Flash**, you're wrong. But it's not your fault. No matter how many hours you spend using your favorite apps, there's no way you could know them as well as the people who created them. No way.

So we went straight to the source—product managers, programmers, and quality-assurance experts—to pump them for their best-kept secrets and arsenals of supercool tricks. We didn't ignore fun stuff, either—we cracked some secrets on one of the most popular games of all time, **The Sims**.

## Adobe Photoshop

### Create Custom Documents

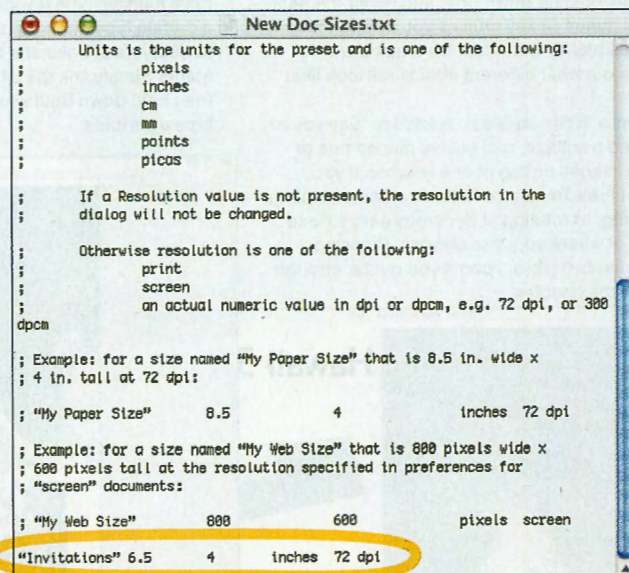
When you create a new document in Photoshop 7, you find a list of standardized document sizes—but there's no way to create your own preset. Right? Wrong! There's just no *easy* way to do it. In your Photoshop 7 folder, look for a Presets folder, and within that folder, a text document called New Doc Sizes.txt. Just add your own presets to this document, and they'll appear the next time you launch Photoshop and create a new document. Follow the directions provided in the New Doc Sizes.txt document to get the formatting right.

Here's another trick for dealing with new documents: If you want to mimic the dimensions of a file that already exists, open that file, bring up the New dialog, and while that dialog is open, go to Window > Documents > file name. Shazam! Your new document picks up the attributes of that file faster than Colin Farrell picks up chicks.



### TIPSTERS:

Adobe's Kevin Connor, director of product management; Julienne Kost, senior evangelist; Marc Pawliger, engineering director



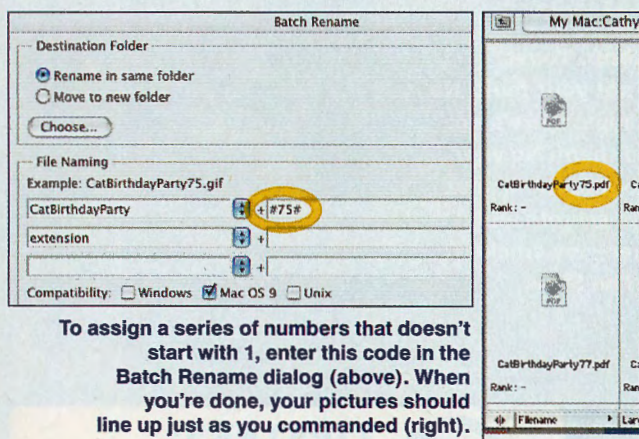
Add your custom preset to the New Doc Sizes.txt document (above), and it'll appear the next time you ask Photoshop to create a new document (left).



## Exploit the File Browser

Many people use Photoshop 7's File Browser to rotate and rank thumbnails methodically—but if you share these files with others, your viewers don't benefit from all your hard work. Fortunately, there's a way to retain rotation and ranking when you move your files: Select Export Cache from the File Browser's flyout to save that information in the same folder as the files. Then if you burn your batch of images to CD or put it on a server for others to view, that information travels along, faithful as Old Yeller.

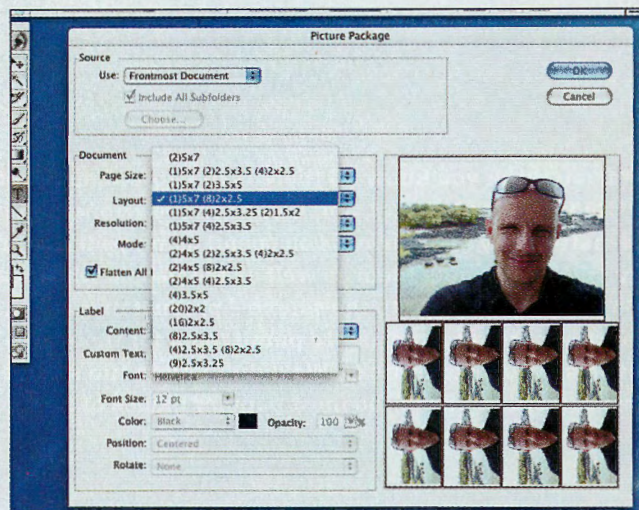
Speaking of the File Browser and batches of images, here's an easy—but unintuitive—way to assign a series of numbers that doesn't start with 1. In the File Browser, select the group of images you want to rename, then select Batch Rename from the File Browser flyout. As you build your name, enter the following where you want your number (for example, 75) to appear: #75#. You'll see your pictures renamed, starting with the number 75.



To assign a series of numbers that doesn't start with 1, enter this code in the Batch Rename dialog (above). When you're done, your pictures should line up just as you commanded (right).

## Print Multiple Pictures

Remember senior year of high school when you exchanged wallet-size yearbook pictures with all your friends? All personalized with cheesy messages on the back, of course ("I loved sitting next to you in AP English this year!" or "You gonna rock at Williams!"). Well, you can relive those years by creating a whole sheet of identical exchangeable pictures. Just go to File > Automate > Picture Package and select from one of many layouts, let Photoshop assemble the collection for you, then cut 'em up and trade 'em with your friends. You can even create your own layout—a read-me file in the Photoshop > Presets > Layouts folder tells you how.



Thanks to Photoshop's Picture Package feature, you have a plethora of ways to be narcissistic.

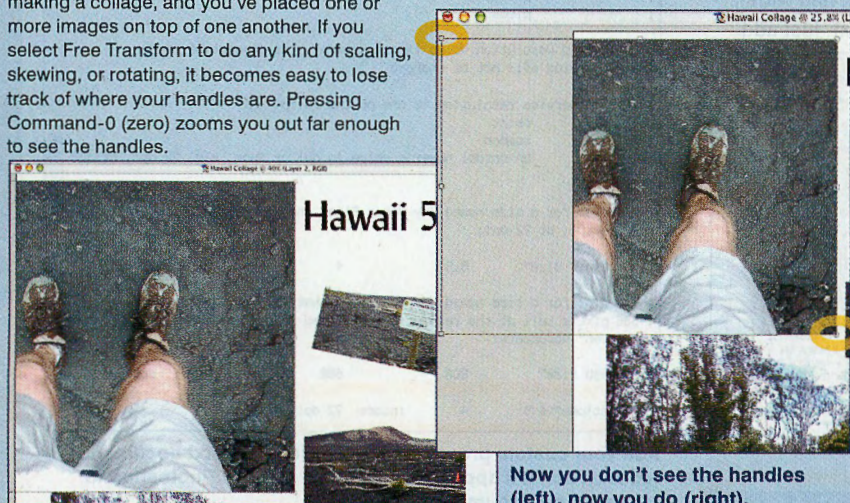
## QUICK TIPS

➔ **Preview Blending Modes** In the Layers palette, holding down Shift and either the plus (+) or minus (-) key cruises you through the various blending modes. It's a quick way to check out what different effects will look like.

➔ **Get a Grip on Your Handles** Say you're making a collage, and you've placed one or more images on top of one another. If you select Free Transform to do any kind of scaling, skewing, or rotating, it becomes easy to lose track of where your handles are. Pressing Command-0 (zero) zooms you out far enough to see the handles.

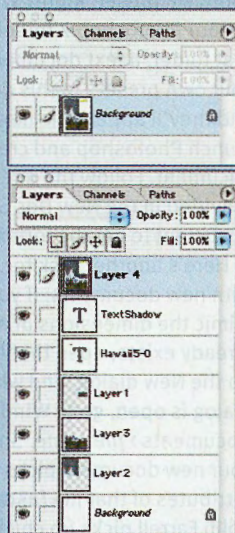
➔ **Apply Type Effects to All Layers** If you have multiple type layers and you want to apply a certain type attribute (say, Anti-Alias Sharp) to all layers at once, the Shift key is your best friend. Simply link the different type layers, and then hold down Shift when you change the type's attribute.

➔ **Flatten Without Losing Layers** Here's a little-known tip: If you have a layered file, you can create a flattened copy of what you have done so far without losing the separate layers you created. Just add a new layer to your document. Hold down the Option key while clicking the Layers palette flyout, and choose Merge Visible. This creates a flattened copy on the new layer you just created, but retains the separate layers. Now you can apply a sharpen filter or another tweak to the grouping.



Now you don't see the handles (left), now you do (right).

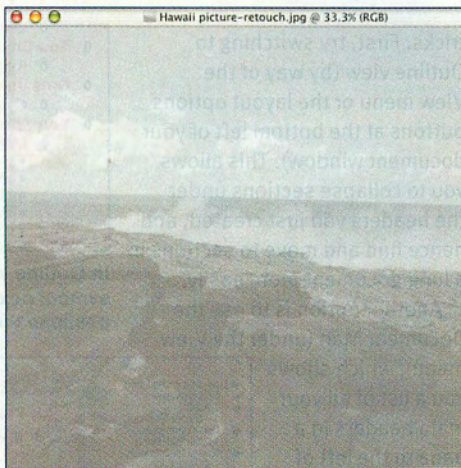
The Merge Visible command flattens the layers you've created so far (top). Holding down Option while choosing Merge Visible retains the layers while also flattening them (bottom).



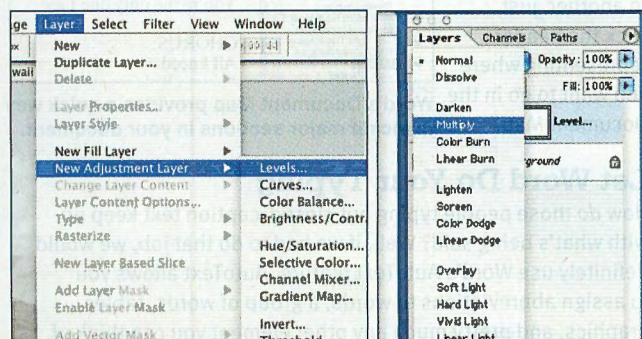


## Fix Faded Photos

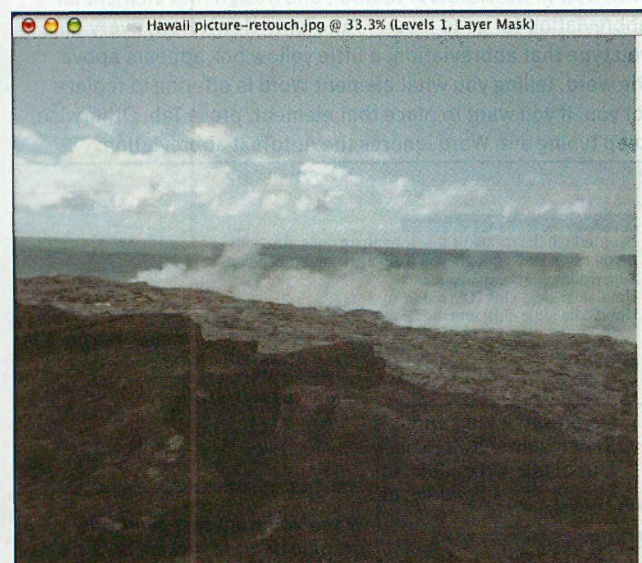
If you have an old, faded photo, here's an easy way to improve its density and contrast. Scan it, then open it in Photoshop and create any type of new adjustment layer (Layer > New Adjustment Layer > Levels (you don't have to select Levels—any option works). Click through the dialogs without changing the settings. In the Layers palette, select Multiply as your blending mode. You now have an extra layer of information in your picture, which should give it more contrast and color without appreciably changing the file size. Bonus!



As you can see, this picture needs a lot of help. Since you can't go back to Hawaii and retake the shot...



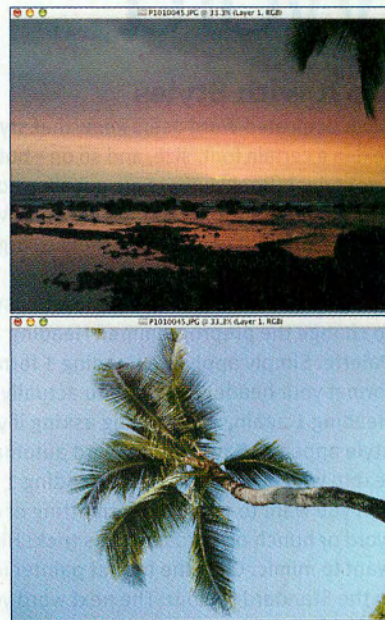
...just create a new adjustment layer (left), change the blending mode to Multiply (right)...



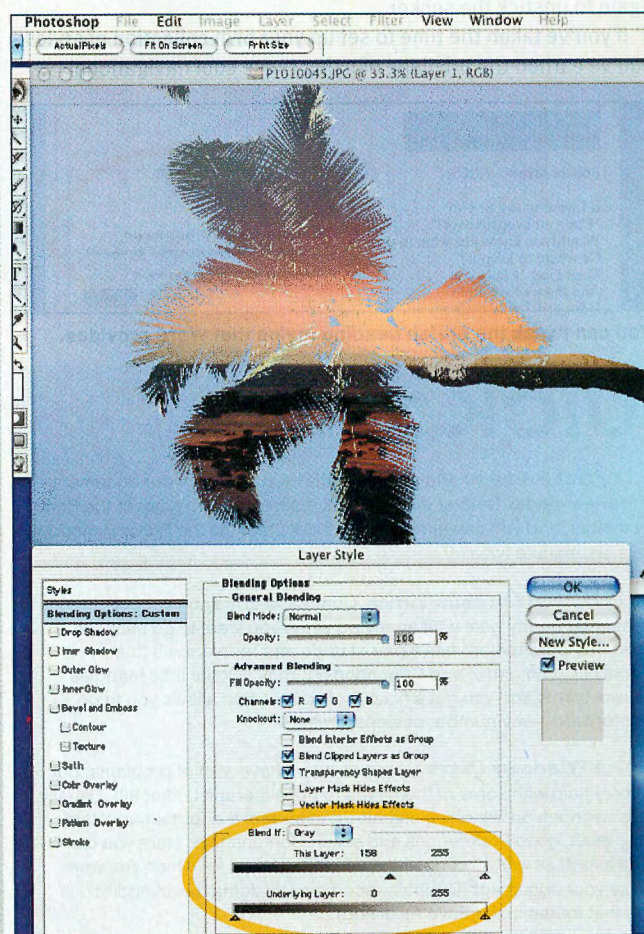
...and bask in the rays of your newly punched-up picture.

## Mask Without Pain

Here's another cool retouching trick. If you hate the tedium of masking (and who doesn't), try this quick-and-dirty way to create a simple mask. Say you want to blend two images. Double-click the top layer's thumbnail in the Layers palette to bring up the Layer Style dialog. Start playing with the sliders in the Blend If pane, and you'll see some cool masking effects taking place. For example, if you choose Blend If Gray, sliding the top slider from the left makes the dark parts of your top image disappear, while sliding it from the right makes the lighter parts disappear.



To create a quick mask of these two images (above), go to the Blend If pane in the Layer Style dialog. Play with the sliders to experiment with different effects (below).





# Microsoft Word

## Do It with Styles

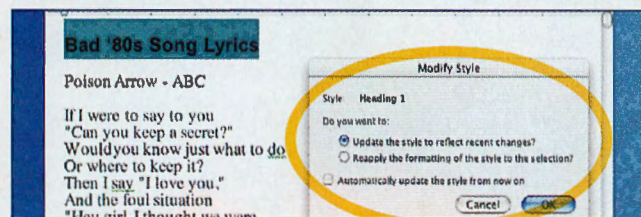
Most dedicated Word users *know* that styles make it easy to format text in a certain font, size, and so on—but how many of us actually *use* styles? (Book authors are not allowed to answer that question.)

Well, not only do styles offer a quick way to pretty up your documents, but you can use them to organize and navigate your document easily.

First, here are a few tips on how to use styles. Say you want to change the preprogrammed Heading 1 style in the Formatting Palette. Simply apply the Heading 1 format to some text, then format your header the way you actually want it to appear. Select Heading 1 again, and a dialog asking if you want to update the style appears. Say OK, and Word automatically updates all the text to which you applied the Heading 1 style.

If you want to apply the formatting of certain text to another word or bunch of words, try this trick: Highlight the word you want to mimic. Click the format painter icon (the paintbrush) in the Standard toolbar. The next word you click takes on the style of your original word. To apply that style to multiple noncontiguous words, double-click the format painter icon to make it stick to all subsequent words you click. Click the icon again to unstick the sucker.

If you've taken the time to set up your own collection of styles, you've earned the privilege of using these cool navigational



You can tweak the prefab heading styles that Word provides.

## QUICK TIPS

► **Edit in Print Preview** Did you know that you can edit your document in Print Preview mode? Neither did we. Click the magnifying glass in the Print Preview toolbar, and you can jump into your document in the Preview window and make last-minute tweaks.

► **Undo and Redo Multiple Times** Command-Z may be your best friend—but that buddy gets a bit annoying when you want to go back ten steps. The Standard toolbar has a pair of undo and redo arrows (the equivalents of Command-Z and Command-Y). But click the little triangles next to these icons, and you get a history of actions that allows you to go back—or forward—any number of steps. Sweet!

► **Help Out Windows Users** Windows users have a lot of problems, but you can only help with some of them (you're not a therapist, after all). Usually Word files will open on Windows machines, even with the formatting intact. But if they don't, go to Preferences and select Compatibility. Here you can substitute a font, as well as choose the version of Word for which you want to optimize your document (DeSpain recommends doing this in addition to selecting that format in the Save As dialog).



**TIPSTER:**  
Microsoft's Stuart DeSpain, lead program manager for user interface

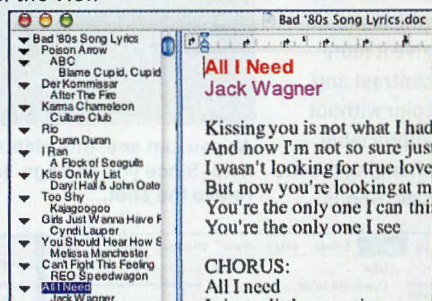
tricks. First, try switching to Outline view (by way of the View menu or the layout options buttons at the bottom left of your document window). This allows you to collapse sections under the headers you just created, and hence find and move to sections in a long document more easily.

Another option is to use the Document Map (under the View

menu), which shows you a list of all your main headers in a pane to the left of your document. If you want to jump from one section to another, just click the header representing where you want to go in the Document Map.



In Outline view, click the symbol next to a header to collapse the text underneath.

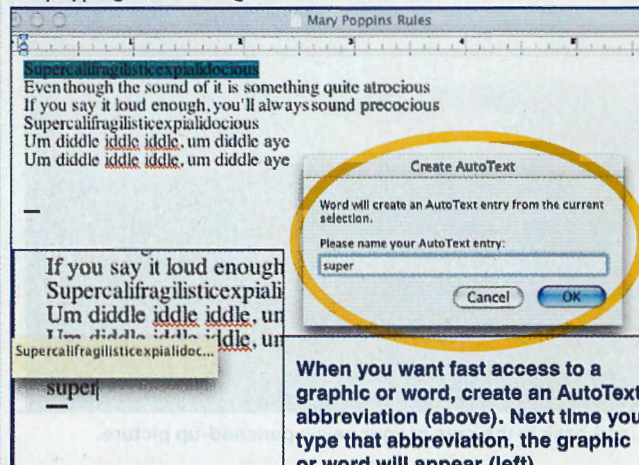


Word's Document Map provides a quick way to locate major sections in your document.

## Let Word Do Your Typing

How do those people typing out closed-caption text keep up with what's being said? Well, if we had to do that job, we would definitely use Word's AutoText feature. AutoText allows you to assign abbreviations to words, a group of words, tables, graphics, and pretty much any other element you can think of.

Bring up the AutoText toolbar (View > Toolbars > AutoText). To add an AutoText entry, highlight the element you want to store, click New in the AutoText toolbar, and assign that element an abbreviation (or go to Insert > AutoText > New). Now, every time you type that abbreviation, a little yellow box appears above the word, telling you what element Word is offering to replace for you. If you want to place that element, press Tab. Otherwise, keep typing and Word ignores the AutoText abbreviation.



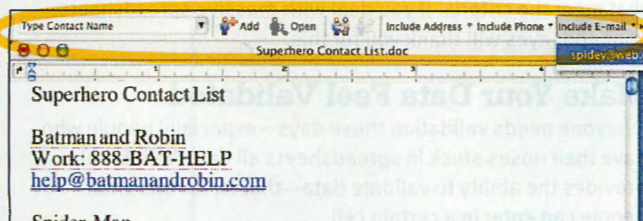
When you want fast access to a graphic or word, create an AutoText abbreviation (above). Next time you type that abbreviation, the graphic or word will appear (left).



## Make Word Rendezvous with Entourage

Microsoft is constantly touting Office's integration of four different apps, especially the camaraderie between Word and Entourage (Microsoft's email, contact, and calendaring app). For example, in Word, if you type a name that's in your Entourage address book, that name autofills. You can then Control-click the name to get extras such as contact info.

But if you do a lot of word-processing work that involves contacts, you might want to call forth the Contact toolbar. Just go to View > Toolbars > Contact to summon a handy toolbar that allows you to look up your Entourage contact info, as well as add it to your document—all from within Word.



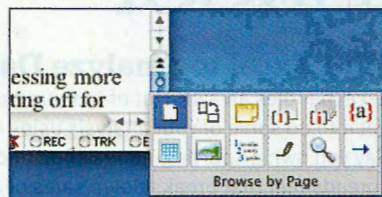
Our superheroes contact list is as handy as our Contact toolbar.

## Replace Find And Replace

There's a simpler way to search for certain elements and words than using the unwieldy Find And Replace. In between the double scroll arrows on the scroll bar, you'll find an innocuous circle.

Clicking this circle allows you to browse by criteria, such as headings, page, section, and comments.

For example, selecting the Browse By Page button takes you to the next page in your document. You can also click the Find button to bring up the good ol' Find box.



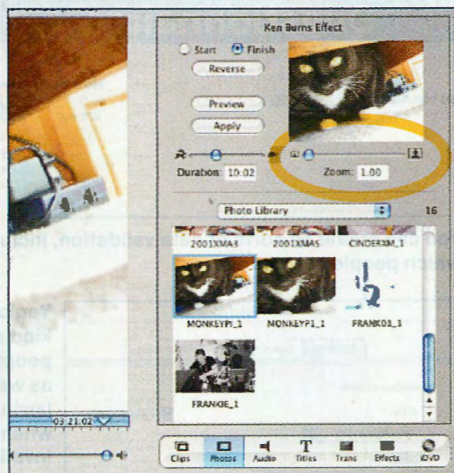
Use the browse doohickey in the scroll bar, along with the double-scroll arrows, to search your document.

Now here's the really useful part: Once you select your search criterion (say you want to browse by page), all you have to do is click the up and down double-scroll arrows to jump to the next item (in this case, the previous or next page). This even works if you select the Find button, choose a word to search by, and close the Find dialog.

# Apple iMovie

## Say No to Ken Burns

We admit it: Most of us here at MacAddict are softies, and we like all that schmaltzy iMovie stuff Apple's always showing off (like videos of some Apple executive's kids running along the beach, set to that sappy Green Day song). So we love the idea of the Ken Burns Effect, which lets you pan and zoom a still photo in iMovie.



To get the Ken Burns out of the Ken Burns Effect, move the Zoom slider as far left as it will go.

But what if you want to place still photos that actually stay still (what a concept)? You need to turn off the Ken Burns Effect. Luckily, it's easy: In the Photos pane of iMovie, pick the image you want, click the Start radio button, and slide the Zoom slider all the way to the left. Then click the Finish radio button and again slide the Zoom slider all the way left.



**TIPSTER:**  
Apple's Michael Uy, product marketing manager

## Place Your Effects Easily

You can easily position visual effects like Lens Flare and Fairy Dust in your video frame. In the Effects pane, select the effect you want—say, Fairy Dust—and then click in the preview window. You can move the path around in the preview window until it's just right. As if you'd waved a magic wand, your fairy-dust path appears where you positioned it.

## Use Chapter Markers without iDVD

You don't need iDVD—or a SuperDrive, for that matter—to use iMovie's chapter markers. Placing a chapter marker in your project (in the iDVD pane) allows you to snap the playhead back to that part of your movie by double-clicking the chapter in the list. This can save time if you're navigating a big, unwieldy iMovie project or you've zoomed the timeline in all the way.

Chapters are a useful way to navigate a long movie.





# Microsoft Excel

## Hire Excel to Analyze Data

Excel handles an awful lot of tedious work, but you can also get it to do some of your analysis using Conditional Formatting. Say you own a sporting-goods shop and you've created a spreadsheet that breaks down sales of different equipment. You want to highlight the goods that earned you more than a certain amount of cash so that you can charge even more next year. Conditional Formatting takes care of that job for you.

The screenshot shows the 'Conditional Formatting' dialog box with 'Condition 1' set to 'Cell Value Is greater than 1500.00'. The preview shows 'AaBbCcYyZz'. Below the dialog is a spreadsheet titled 'demo.xls' with columns for 'Column1', 'Qtr 1', 'Qtr 2', 'Qtr 3', 'Qtr 4', and 'Totals'. The 'Totals' column is highlighted in yellow, indicating values greater than 1500.00.

Column1	Qtr 1	Qtr 2	Qtr 3	Qtr 4	Totals
Soccer Balls	\$ 424.00	\$ 541.00	\$ 716.00	\$ 856.00	\$ 2,537.00
Soccer Shoes	254.00	343.00	509.00	639.00	1,745.00
Warm-Ups	194.00	289.00	505.00	432.00	1,420.00
Bags	156.00	189.00	195.00	210.00	750.00
Shinguards	212.00	234.00	256.00	272.00	974.00
Hats	112.00	113.00	160.00	185.00	570.00
Books	86.00	110.00	112.00	158.00	466.00
Socks	175.00	186.00	204.00	236.00	801.00
T-Shirts	150.00	163.00	185.00	196.00	694.00
Shorts	310.00	358.00	375.00	408.00	1,451.00
Videos	65.00	78.00	96.00	108.00	347.00
Medical	158.00	218.00	245.00	285.00	906.00
Jewelry	87.00	110.00	118.00	157.00	472.00
Goalie Gloves	368.00	375.00	415.00	435.00	1,593.00
Accessories	199.00	717.00	319.00	225.00	1,460.00
Total					16186

Enter criteria and text formatting in the Conditional Formatting box (top), and the results appear before your very eyes (bottom).

## QUICK TIPS

► **Learn Your Returns** When you want to add a carriage return within a cell, pressing Return won't do the trick—that just takes you to the next row. Instead, press Control-Command-Return or Control-Option-Return.

► **Date Your Spreadsheets** Here are a couple of dating tips (don't get excited—these are of the Excel variety). To enter today's date quickly, press Control-semicolon (;). To enter the time, press Shift-Control-semicolon. To set up a spreadsheet that updates the date every time you open it, type `=today()`. To make both the date and the time update, type `=now()`.

The left screenshot shows a spreadsheet with a cell containing `=now()`. The right screenshot shows the same spreadsheet after the formula has been entered, displaying the current date and time: 3/27/03 16:49.

Enter the correct code (left), and your spreadsheet will forever keep up with the times (right).



**TIPSTER:**  
Microsoft's Kris  
Barton, lead  
program manager

Simply highlight the rows or columns you want Excel to analyze. Go to Format > Conditional Formatting. In the dialog that appears, enter your criterion—in our sports-store example, we wanted to get all totals that exceeded \$1,500. Next, click Format to choose how you want to call out the results (for example, bold or in a different color). Click OK, and Excel highlights all the cells that meet the criteria. If you deal with massive spreadsheets, your poor eyes will thank you for this.

## Make Your Data Feel Validated

Everyone needs validation these days—especially people who have their noses stuck in spreadsheets all day. Well, Excel provides the ability to validate data—that is, restrict what people can enter in a certain cell.

For example, if you're putting together a survey, you don't want to offer people too much freedom with their answers, or the info you collect won't tell you much. Use Excel's Data Validation feature to restrict what kind of responses people can give.

To do so, click the cell, go to Data > Validation, and enter your restrictions. You can also create an error message that pops up if anyone enters the wrong data, or a text box that floats over your answer cells to provide guidance. Never underestimate the amount of guidance people need with these things.

The screenshot shows a spreadsheet titled 'Questionnaire' with a cell containing the value '20'. A dropdown menu is open, showing a list of options: 'a. 0', 'b. 1-2', 'c. 3-5', and 'd. 6-7'. The 'c. 3-5' option is selected, and a yellow circle highlights the dropdown menu.

You can create all sorts of data validation, including a list from which people can choose.

The left screenshot shows the 'Data Validation' dialog box with the 'Settings' tab selected. The 'Allow:' dropdown is set to 'Whole number', and the 'Data:' dropdown is set to 'between'. The 'Minimum:' value is 0 and the 'Maximum:' value is 24. The right screenshot shows the 'Data Validation' dialog box with the 'Error Alert' tab selected. The 'Show error alert after invalid data is entered' checkbox is checked. The 'Style:' dropdown is set to 'Stop', and the 'Title:' is 'Wrong Answer!'. The 'Error message:' text box contains the text: 'Your answer should be between 0 and 24.'

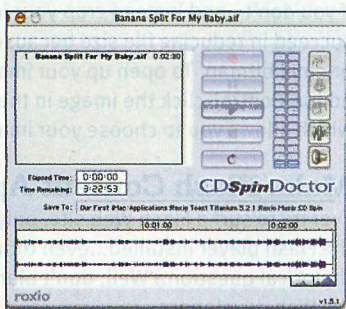


# Roxio Toast

## Update Your Vinyl Collection

Most of us born in the pre-CD generation want to know how to convert our old Linda Ronstadt, Go-Go's, and, um, Loverboy LPs to CD. Believe it or not, all the software (and even the cable) you need is right in the Toast box. "It's not a hidden trick," says Fingerman, "but it *is* a hidden piece of software."

Inside the Toast folder, a Roxio Music folder contains an app called CD Spin Doctor. And inside the Toast box is the cable you need to connect your Mac to your stereo. Once you're hooked up, CD Spin Doctor records Linda, Belinda, and, um, Mike in all their glory and converts the music to a digital waveform, which you can then use to cut the tracks as well as clean up noise and pops. And you thought you'd have to buy new CDs to replace your LPs.



**CD Spin Doctor is the hidden treasure in the Toast box for those who want to convert vinyl to CD.**

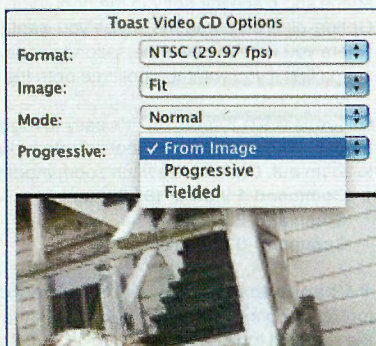
## Make Data DVDs the Right Way

Here's an example of a feature that Fingerman recommends using *less*. Toast's Other menu offers the ability to burn a DVD. But don't use that option if you're burning a data DVD—instead, use the regular Data window that you use for burning CDs. Data DVDs use the UDF (universal disk format) file system, whereas a regular data disc takes advantage of HFS+ (Hierarchical File System Plus). Since Apple's UDF support isn't as good as its HFS+ implementation, you'll get better results with HFS+ discs. For instance, they'll maintain file settings like Show Info comments and locked files. Plus, Mac OS X won't try to launch the DVD player as it does with UDF discs.

## Create Progressive CDs

Maybe you're a high-end videographer who wants to burn progressive-scan (aka noninterlaced) video to a Video CD. Toast does in fact support your endeavor, but this ability is well hidden.

Go to the Other menu and select Video CD. When you're dragging your movie to the Toast window, press Option. In the Toast Video CD Options dialog that appears, you'll see a menu you've probably never spotted before: the Progressive menu, which provides high-end settings only those of you with fancy camcorders capable of progressive-



**Hidden options reveal themselves when you press Option as you drag a movie to the Toast Video CD window.**



## TIPSTERS:

Roxio's Adam Fingerman, senior product manager; John Acree, SQA lead

scan video can utilize. You'll also see a new option under the Format menu: NTSC (23.976 fps). Most of you don't need these high-end options. But it's there for those four—uh, we mean few—of you who do.

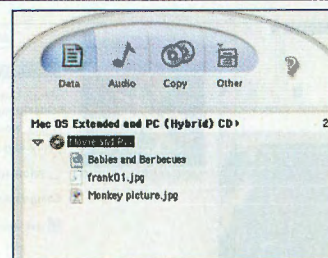
## Enhance Your CDs

If you want to make audio CDs with a little extra somethin' special, Toast lets you create enhanced CDs. An enhanced CD plays in your CD player, and also offers multimedia content—slide shows, QuickTime movies, and so on—when you pop it in your Mac.

The thing is, you don't want to make an enhanced CD via the Enhanced CD option under the Other tab. Why? Because this option creates discs in an old format that requires the QuAC (QuickTime Audio Containable) multimedia format Apple used to tout years ago. Currently no tools author this outdated type of content. Roxio left the option intact as a favor to old-timers who still have QuAC files.

The rest of you will have to create enhanced CDs in a much less intuitive manner. First, burn an audio CD using the Audio window. When you burn that CD, choose Write Session. When you're done, add QuickTime movies, slide shows, PDF files—whatever—to the Data window, but this time select Write Disc when you burn your disc.

Heed this warning: Do *not* burn the data session first! If you do, and then slip that disc into a standard CD player, the ungodly noise caused by the data could potentially ruin your speaker system. And that would suck.



**To make an enhanced CD, first burn an audio disc session (top), then a data disc (above).**

## QUICK TIPS

➔ **Kill Your Data** Say you have a bunch of files sitting in both the Data and Audio windows, and you'd like to expunge them. Several keyboard shortcuts can pull the trigger. To delete every file in just the window that's open, press Command-Option-Delete. To delete every file you've dragged into Toast—regardless of which window it's in—press Command-Option-Control-Delete. Thank god for our ten fingers and two hands.

➔ **Select Your Burner—Fast** If you have multiple burners—you lucky dog—and want to select which one to use, at the bottom of the Toast window you'll find a bar listing the currently selected drive; click this bar to cycle through your drives.

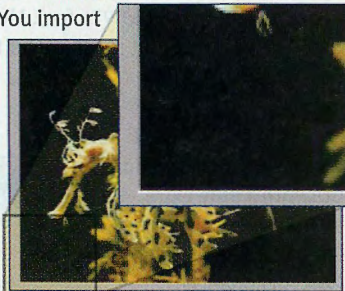


# Macromedia Flash

## Make Your Bitmaps Behave

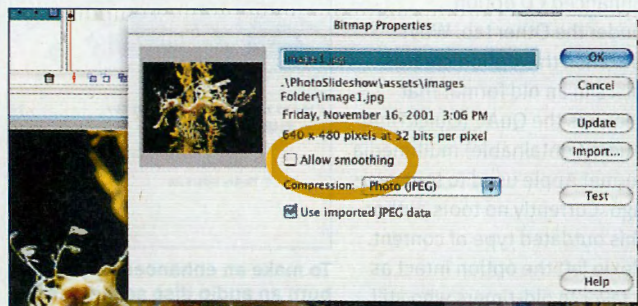
Does this ever happen to you? You import

a beautiful bitmap image into Flash and place an outline around it, but you can't quite get the outline and image to line up no matter how much of a pixel perfectionist you are. Well, you're not alone—a lot of people out there share your pain. Luckily, Williams says there are several different ways to deal with problematic bitmaps. (By the way, bitmap display problems result from the fact that Flash is a vector-based tool rather than a bitmap-native one).



The subtle white outline around this image is a little too subtle on the top and left.

**1** Try disabling the Allow Smoothing option. Double-click the image from the Library, which brings up the Bitmap Properties box. From here, *uncheck* the Allow Smoothing check box.



**Uncheck Allow Smoothing for a smoother viewing experience. It's counterintuitive, but it works.**

**2** Use the Scale command (Modify > Transform > Scale) to shrink your image ever so slightly, leaving a tiny space between image and outline.

**3** Convert the bitmap to individual pieces using the Break Apart command (Modify > Break Apart). This converts the solid fill into vectors, which the Flash renderer can deal with better.

**4** If jumping occurs during an alpha tween (which lets you do a fade effect), try a different alpha value during the tween's start or finish. For example, try setting the alpha value (in the property inspector) of your symbol to 99 percent instead of 100, or 1 percent instead of 0.

**5** Move the registration point (the point where the player starts drawing a graphic) to the lower-right corner. Most users set the registration point to the upper-left corner. Moving it to the lower-right one gives the x and y coordinates a negative value, which helps solve the imprecision error that currently causes bitmap shifting within Flash. To move the registration point,

double-click a symbol and move it so that the crosshair (which represents the registration point) is where you want it.

**Here's another tip:** To optimize a bitmap image, you must use a bitmap editor like Macromedia Fireworks or Adobe Photoshop. If you don't—and instead crop your image in Flash—you won't succeed in reducing file size because Flash is still storing the original bitmap. To open up your image quickly in a bitmap editor, Control-click the image in the Library and select Edit With, which allows you to choose your image editor du jour.

## Make Flash Content Appear Correctly

Ever try to surf a Flash Web site, only to be told you don't have the Flash player installed...even though you do? (That's a rhetorical question.) Well, don't blame Macromedia; blame the Web developers.

So all you Web developers, listen up: To deploy your Flash content so that everyone—especially Mac users—can view your content, do *not* try to roll your own scripts. Instead, Williams asks that you please, *please* use Macromedia's free Flash deployment kit (downloadable from [www.macromedia.com/software/flash/download/deployment\\_kit](http://www.macromedia.com/software/flash/download/deployment_kit)). According to Williams, using this kit will ensure that your beautiful content gets out there correctly *and* that you don't have to recode your scripts when new versions of Flash come out.

## QUICK TIPS

➤ **Change Kerning** An easy way to change the kerning between static text in Flash is to press Command-Option plus either the left or right arrow key.

➤ **Look Around the Stage** It's a cinch to pan the stage quickly—no need to navigate using scroll bars. With any tool selected and the cursor positioned over the stage area, hold down the space bar to access the hand tool.

➤ **Move Entire Objects** If you want to move *both* the stroke and fill of an object, you need to double-click the object. Single-clicking makes it lose its outline.

➤ **Duplicate and Move Shapes** In one fell swoop you can duplicate a shape *and* place the copy in the right spot. With the arrow tool selected, Option-click and drag the shape you want to duplicate, letting go at the spot where you want to place the second shape. Don't forget to double-click the shape first if you want to duplicate both the stroke and the fill.

➤ **Zoom with Freedom** It's easy to toggle between the different zoom modes. With the magnifier tool selected, press Option to switch from zoom in to zoom out. Oh, and to switch zoom modes quickly, try these shortcuts:

**Command-1** View at 100 Percent

**Command-2** Show Frame

**Command-3** Show All

➤ **Change the Eyedropper's Behavior** When you use the eyedropper tool, clicking a fill color merely changes the current fill color and switches the selected tool to the paint bucket. But if you Shift-click a color with the eyedropper, you can change both the fill *and* outline colors, and the eyedropper remains active.



**TIPSTER:**  
Macromedia's  
Michael Williams,  
product manager



# The Sims



## TIPSTER:

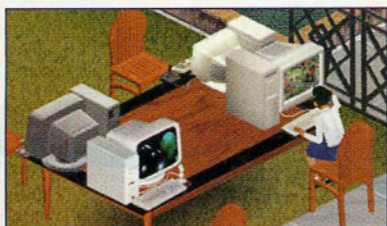
Westlake Interactive's Phil Sulak, vice president and lead programmer for The Sims

## Find the Secret Easter Egg

The Sims started life as a PC game, but that doesn't mean the Mac programmers didn't have a little fun. Originally, Sulak wanted to insert an iMac into the game as an object for Sims to purchase, but concerns over copyright issues put the heave-ho on those plans. Instead, he opted for something a little subtler.

To find this undocumented Mac-specific Easter egg, first buy your Sim a computer. Click the computer and select Play. Then press Command-Shift-E until your Sim turns on the computer. As the machine boots up, you should hear the dulcet sounds of a Mac starting up. Each of the four available computers gives you a start-up chime from a different Mac era (remember that ol' Mac Plus bling?). If your Sims can't buy a Mac, at least they can bask in the aural pleasure of one.

**Buy all four computers, and you'll be privy to an Easter egg tailor-made for Mac lovers.**



## QUICK TIPS

- ➔ **Command-P** This utilitarian combo pauses the game and brings you to the desktop.
- ➔ **Page Up and Page Down, or Tab** Use these keys to toggle between upstairs and downstairs.
- ➔ **Plus (+) and minus (-)** Zoom in and zoom out. You probably never guessed that.
- ➔ **Space Bar** Press this to cycle between the different characters. And to think that all these years you've been using your mouse to do that...

- ➔ **Comma (,) and period (.)** These keys rotate the camera 90 degrees.

- ➔ **1, 2, and 3** Use these keys to control the speed of the action (1 is slowest, 2 is medium, 3 is fastest).

- ➔ **Control-click a character in the Mood bar** This shortcut tells the camera to follow your Sim wherever he or she goes.



Control-click a character's face in the Mood bar and you'll see a red crosshair. This means the camera will follow your Sim.

## Kill 'Em with Creativity

Fans of The Sims love to find new and creative ways to kill off their characters (hey, at least we're taking out our frustrations on fake people, OK?). So here's one of Sulak's favorite killer tips: Simply build a long, thin pool all the way around your Sims' house, moat style. Now they can't get out to go to work, nobody can come by, and even the fire department can't save them. Tragic.



A harmless little fire becomes a catastrophic affair for our Sims when there's a moat around the house. Makes it kind of difficult for the fire department to do its job.

Exec. Editor Cathy Lu wanted to share official MacAddict secrets but was afraid of being branded a tattletale.



# Sexy at 17



by Narasu Rebbapragada  
photography by Mark Madeo



# MacAddict Stares Down the World's Best 17-Inch LCD Displays...and Tells You Which Ones Reign Supreme







Today's LCD displays are like reality-TV bachelorettes. Thin, stylish, and beautiful to behold, they make CRTs look as frumpy as Roseanne Barr in hip-huggers—but just add a little competition and they reveal the ugly truth about what they're really like.

To determine who's the fairest of them all, we assembled ten 17-inch LCD displays and put them through a grueling two-week contest of lab tests, real-world photo inspections, video screening, and design and value analysis. When we tallied up the scores, one reigned supreme, three earned honorable mention, four proved to be plain Janes, and two lay clawed and scratched by the roadside.

### A FEW WORDS ABOUT OUR CONTESTANTS:

First, although we ran the full battery of tests on only the popular 17-inch display size, we also got our hands—and eyeballs—on a bevy of 20-inchers (see “Add 3 More Inches!”, below, for our findings). Second, we tested only digital DVI and ADC connections. Connecting one of these digital displays to an analog VGA port won't give you the cleanest signal—we advise against it.

For our overall results, see “The Bottom Line,” p32. For the full story on how our ten competing bachelorettes fared, read on.

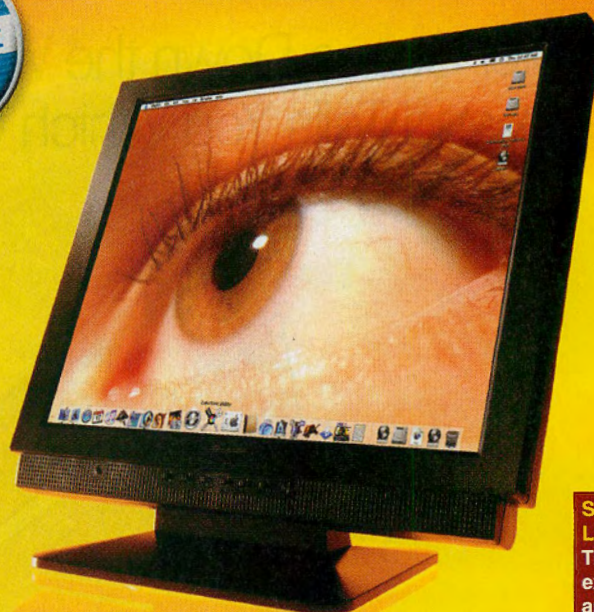
## THE WINNER

**SCORE** 84% Sharp LL-T17D3

An inexpensive newcomer, the \$500 Sharp LL-T17D3, takes top honors. Released just this February, this bland-looking display has image quality that's anything but bland. It's the only display that earned a perfect score on all our Levels and Uniformity tests (see “How We Tested,” p33, for details on testing). In our more-subjective Image Quality tests, it did a fine job of representing the skin tones in photos of our staff, and the wine and cheese image we used to check contrast looked exceptionally crisp. The company claims a contrast ratio of 500:1

and brightness of 250 cd/m<sup>2</sup>, and we saw no reason to doubt these claims. (See “Specs,” p31, for a full account of each display's features—cd/m<sup>2</sup> means candelas per square meter, an industry-standard measure of a display's brightness.)

Two main drawbacks dinged the Sharp LL-T17D3's overall score: viewing angle and industrial design. Its meager 135-degree vertical viewing angle means that you have to sit fairly still to get a perfect picture—head bobbing throws it out of whack. As for its design, it's neither here nor there—it's just blah. A little advice to those Sharp engineers: If you're going to create such a stellar display, design a case to match.



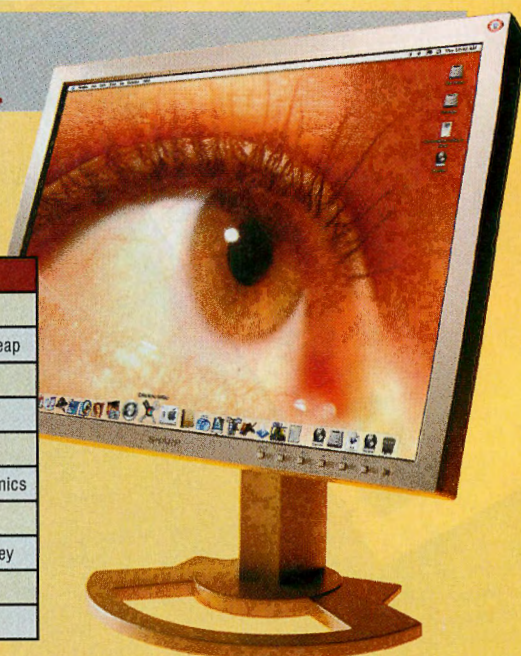
**Sharp LL-T17D3:**  
The least expensive and the best. Awesome.

## Add 3 More Inches!

### IF YOU'VE GOT THE CASH, A 20-INCH LCD IS A GREAT STEP UP.

A few short years ago, 15-inch displays were way cool and 17-inchers were waaaaaaay cool. Today, 20-inchers with 1,600-by-1,200-pixel resolutions are the reigning desktop status symbols—but in most cases, only those with deep pockets need apply. We gathered data on LCD displays hovering around the 20-inch size—those offered by many of the companies that provided our 17-inch contestants, along with a couple of others.

Display	Web Site	Size	Price	All in all...
Apple Cinema Display	www.apple.com	20 inches	\$1,299	Affordable
Cornea Systems CT1904	www.corneasystems.com	19 inches	\$649	Downright cheap
Formac gallery 2010 Platinum	www.formac.com	20.1 inches	\$1,399	Beautiful
LaCie photon20vision	www.lacie.com	20 inches	\$1,699	Solidly built
NEC MultiSync LCD2080UX	www.necmitsubishi.com	20.1 inches	\$1,599	Kludgy case
Princeton Graphic Systems SEnergy 981	www.princetongraphics.com	19 inches	\$1,000	Good ergonomics
Samsung SyncMaster 210T	www.samsungusa.com	21.3 inches	\$1,659	Versatile
Sharp LL-T2020	www.sharpsystems.com	19.9 inches	\$1,999	Great but pricey
Sony SDM-X202	www.displaysbysony.com	20 inches	\$1,999	Sleek 'n' sexy
ViewSonic VX2000	www.viewsonic.com	20.1 inches	\$1,350	High contrast





## RUNNERS-UP

**SCORES** 82% Apple Studio Display  
81% Formac gallery 1740  
79% Sony SDM-X72

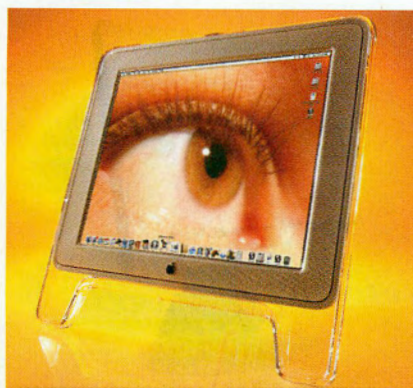
Close behind the Sharp LL-T17D3 come the Apple Studio Display, Formac gallery 1740, and Sony SDM-X72—so close, in fact, that if they all didn't cost nearly \$200 more than the Sharp display, one of them would be taking home the Editors' Choice medallion. But you pays your money and you takes your choice—and all else being essentially equal, a lower price is A Good Thing.

Apple's 17-inch LCD Studio Display impressed with its combination of great design, crisp picture, true color, and near-perfect viewing angle. The Studio Display did a close-to-perfect job in both the Levels and Uniformity tests—not as good a job as the Sharp, Formac, and Sony displays, but close. In our real-world Image Quality tests, the Studio Display showed our attractive staff members true to their assorted human colors, although their cheeks looked a little reddish and a bit soft—not surprising, since this display claims the lowest brightness and contrast levels of any of the displays we tested.

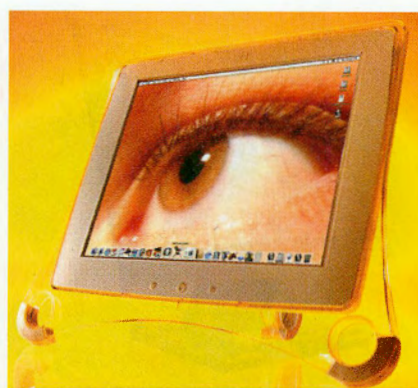
Low contrast and brightness would suggest that reading small black text would get tiresome, but it didn't bother our experienced eyes.

The Studio Display comes with a snap-in, snap-out ADC connector and two USB ports—the Formac gallery is the only other 17-inch display that offers USB convenience. We should also point out that the Studio Display doesn't provide any on-display brightness or contrast controls—you adjust everything via the Mac OS.

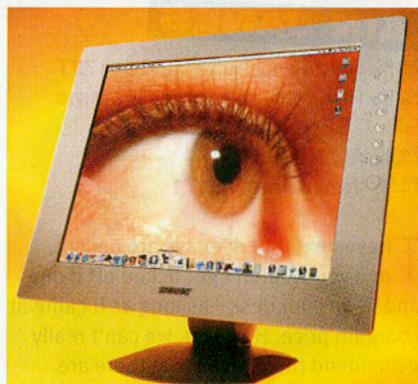
Like the Sharp LL-T17D3, the Formac gallery 1740 aced the Levels tests—but it slipped a tiny bit in overall Uniformity. In our Image Quality tests it gave editor Rik blotchier-than-usual cheeks, and our



**Apple Studio Display:** Well built and offers great image quality, but dim.



**Formac gallery 1740:** Good video and color fidelity, iffy design.



**Sony SDM-X72:** Sony does personal electronics right. Again.

wine-and-cheese glamour shot just didn't pop. Video performance kicked hiney, however, due to the gallery 1740's high-speed MVA (multiple vertical alignment) LCD technology, unique among the displays we tested.

Formac seems to have taken a cue from Apple when designing this attractive, translucent unit. Unfortunately, it didn't include the Studio Display's formidable solidity—compared to the other displays, the gallery 1740 felt a bit flimsy. Also, like the Apple display, it lacks on-display controls. Last year, by the way, we gave this display a rating of *Freakin' Awesome* (Reviews, Mar/02, p49)—but that was when the Apple Studio Display cost \$999. Today, both the Studio Display and the gallery 1740 (in its ADC incarnation) go for \$699 (SRP).

Also costing \$699 (\$660 street) is Sony's SDM-X72. Like Apple's, Sony's industrial design is impressive, including a beautiful silver frame and a neat cord-management scheme in which the entire back panel pops off to hide the cords. Sony's Color tests were on par with Apple's, and its Gray tests were perfect. Image Quality results were good, but in the wine-and-cheese challenge, it was slightly less sharp than the, uh, Sharp and Apple displays.

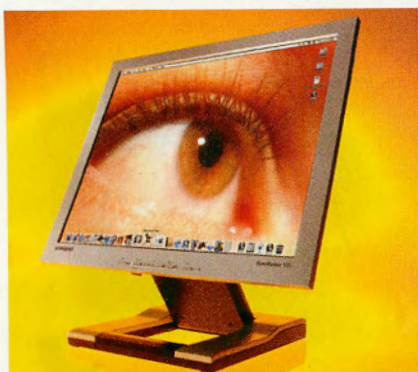
## Specs

### HERE ARE THE SPECS—AT LEAST, AS LISTED ON THE BOX.

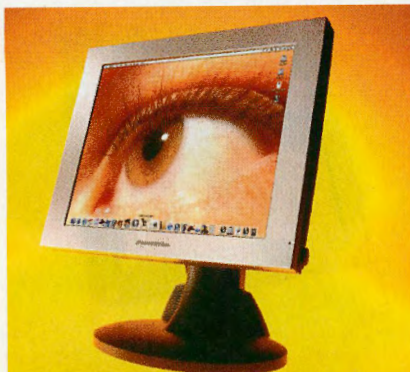
The following table lists each display's specifications, as told to us by the companies themselves. Now, not that we doubt the complete and utter veracity of each and every manufacturer's claims—but since Roman times, *caveat emptor* has always been a good philosophy.

	Price	Screen Size (inches)	Brightness (cd/m <sup>2</sup> )	Contrast (ratio)	Viewing Angle (vertical/horizontal)	Ports
<b>AG Neovo X-174</b> www.neovo-usa.com	\$750 (street)	17.4	220	400:1	160/160	DVI, VGA, S-Video, Composite
<b>Apple Studio Display</b> www.apple.com	\$699 (SRP)	17.0	200	350:1	170/170	ADC, USB
<b>Formac gallery 1740</b> www.formac.com	\$699 (SRP)	17.4	220	400:1	160/160	ADC, USB (DVI model also available)
<b>Hitachi CL-174</b> www.hitachi.com	\$625 (street)	17.0	260	400:1	160/160	DVI, VGA
<b>NEC MultiSync LCD1760NX</b> www.necmitsubishi.com	\$550 (street)	17.0	260	450:1	160/160	DVI, VGA
<b>Princeton Graphic Systems SEnergy 751</b> www.princetongraphics.com	\$760 (street)	17.4	220	400:1	160/160	DVI, VGA
<b>Samsung SyncMaster 172T</b> www.samsungusa.com	\$625 (street)	17.0	250	500:1	170/170	DVI, VGA
<b>Sharp LL-T17D3</b> www.sharpsystems.com	\$500 (street)	17.0	250	500:1	135/160	DVI, VGA
<b>Sony SDM-X72</b> www.displaysbysony.com	\$660 (street)	17.0	280	400:1	160/160	DVI, VGA
<b>ViewSonic VG171</b> www.viewsonic.com	\$600 (street)	17.0	250	400:1	140/150	DVI, VGA

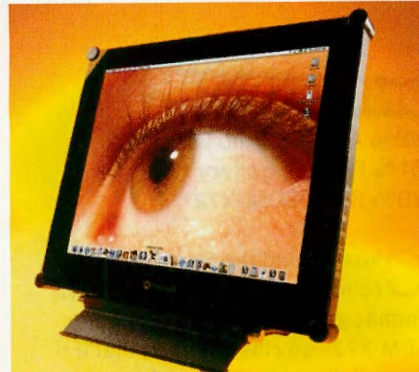




**Samsung SyncMaster 172T:** This looks better on paper than in real life.



**Princeton Graphic Systems SENergy 751:** Expect more for this much cash.



**AG Neovo X-174:** Well designed and competent, but overpriced.

## PLAIN JANES

**SCORES**  
**73%** Samsung SyncMaster 172T  
**72%** Princeton Graphic Systems SENergy 751  
**71%** AG Neovo X-174  
**71%** ViewSonic VG171

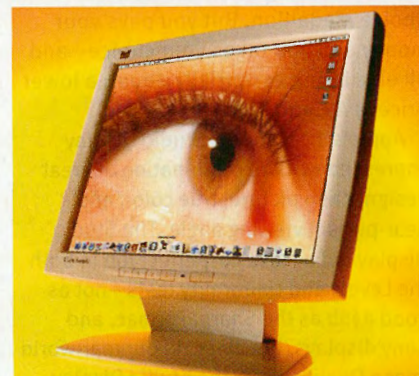
These next four displays are decent, and you wouldn't get ticked off if one landed on your desk—as long as it came at a bargain price. However, we can't really recommend them given that there are better, more affordable alternatives. In fact, two members of this quartet are the highest-priced displays in this roundup.

Samsung's SyncMaster 172T has an awesome industrial design suitable for both desktop and wall-mounted display. The SyncMaster 172T looks good on paper with a 500:1 contrast ratio and 250 cd/m<sup>2</sup>

brightness, but in our Image Quality tests, it didn't live up to the promise of its specs. Our editors looked pasty, the wine bottle was fuzzy, the image of the orange we used for the Subtlety test was patchy, and the video was lackluster.

Princeton Graphic Systems' SENergy 751 offers great ergonomics: It raises, lowers, tilts, and swivels. Its silver bevel is easy on the eyes. The screen also rotates 90 degrees from landscape to portrait mode, but unfortunately the software required for rotating the image—Portrait Display's Pivot Pro (\$49.95, <http://us.portrait.com>)—is currently Windows only. Bad dog, Portrait Display, bad, bad!

At its factory default settings, the SENergy 751 produced mediocre results in our Color test, losing both blue and green color gradations at the lighter end of the spectrum. Once we tweaked the contrast, however, it performed well. Ditto on the Gray test. The SENergy 751 performed solidly in our Image Quality tests, although it's not the brightest kid on the block with its 220 cd/m<sup>2</sup> brightness rating. In our video screening it performed on par with the other displays in this category, but the



**ViewSonic VG171:** Acceptable—if you work only in black and white.

video image was less crisp than the upper-tier displays'.

AG Neovo seems to be the only company that isn't lowering its prices. We found street prices on the X-174 as high as \$849 but usually around \$750. Ouch. A display ought to be exceptional to cost that much, and unfortunately the X-174 isn't. Not that it's bad, mind you. Back in March 2003, we gave it a *Great* rating (*Reviews*, Mar/03, p52) for its sleek design, good color, and wealth of connectivity options (DVI, VGA, S-Video, and composite)—but that was before Apple and others dropped their prices.

## The Bottom Line

**WHO WON, AND WHY.**  
 Testing the bejezus out of our ten 17-inch contestants confirmed our suspicions: No LCD display is perfect. Each and every unit had at least one pimple on its lovely visage—and some had full-blown acne attacks.

To rank the displays, we assigned each score (on a scale of 1 to 5, with 5 being best) a percentage weighting—industrial design, for example, accounted for 7.5 percent of our score, while price counted for a solid 15 percent. Our test-analysis spreadsheet then spit out scores for each display.

score (on a scale of 1 to 5, with 5 being best) a percentage weighting—industrial design, for example, accounted for 7.5 percent of our score, while price counted for a solid 15 percent. Our test-analysis spreadsheet then spit out scores for each display.

			Levels			Uniformity		Image Quality				Viewing Angle		Construction		
			Value	Color	Gray	White	Black	Skin Tones	Subtlety	Contrast	Video	Vertical	Horizontal	Features	Design	
THE WINNER	84%	Sharp LL-T17D3	5	5	5	5	5	5	5	5	4	2	4	2	3	
	RUNNERS-UP	82%	Apple Studio Display	3	4	4	3	5	5	5	5	4	5	5	3	5
		81%	Formac gallery 1740	3	5	5	4	4	4	4	4	5	5	4	3	3
		79%	Sony SDM-X72	3	4	5	5	4	5	5	4	4	4	4	2	4
PLAIN JANES	73%	Samsung SyncMaster 172T	3	4	4	5	5	3	4	4	3	4	4	1	4	
	72%	Princeton Graphic Systems SENergy 751	1	4	4	4	5	4	4	4	4	4	4	4	4	
	71%	AG Neovo X-174	1	4	4	4	5	4	4	4	4	4	4	3	4	
	71%	ViewSonic VG171	4	3	5	5	5	4	3	5	4	2	4	1	1	
LOSERS	58%	Hitachi CL-174	3	2	2	5	2	4	4	4	4	3	4	1	2	
	57%	NEC MultiSync LCD1760NX	4	1	1	5	5	3	3	4	3	3	4	1	1	
Test weighting:			15%	10%	10%	7.5%	7.5%	3.3%	3.3%	3.3%	10%	7.5%	7.5%	7.5%	7.5%	



Though its specs boast a 400:1 contrast ratio, none of our test photos or video appeared very sharp.

ViewSonic's VG171 got our equivalent of the reality-TV wild card. Its color performance tempted us to toss it into the Losers bracket, but the Uniformity, Gray, and Contrast tests saved it from that ignominious fate. If color doesn't matter much to you—say your job is to lay out the *Wall Street Journal*—this \$600 display might suit you well. However, like the Sharp LL-T17D3, the VG171 has a minimal vertical viewing angle, and its cheesy industrial design tied for worst of the lot.

## LOSERS

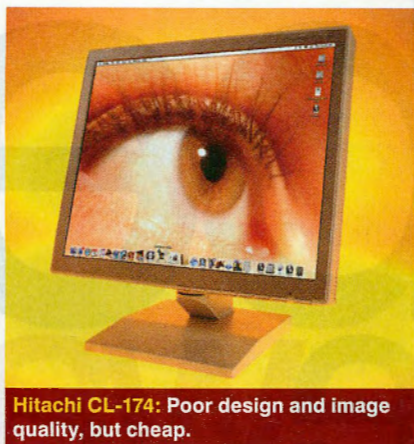
SCORES

**58% Hitachi CL-174**

**57% NEC MultiSync LCD1760NX**

In any reality-TV show—or product comparison, for that matter—somebody's gotta go down hard. Here are the big-time losers of this competition.

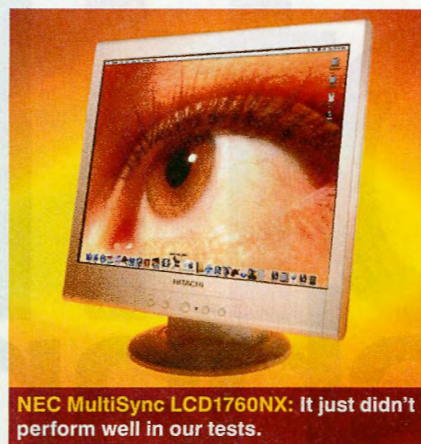
At the top of the bottom is Hitachi's CL-174. Its beige design is boring, although Hitachi's distributor, MonitorsDirect.com, says it can't keep the identical-but-black version in stock. In our Levels tests, the CL-174 had trouble distinguishing pinks and blues and completely washed out lighter shades of gray—apparently it can't handle its 260 cd/m<sup>2</sup> brightness rating (among the highest of the bunch). Further evidence of its out-of-control brightness was our



**Hitachi CL-174: Poor design and image quality, but cheap.**

editors' brilliantly white teeth—whiter than our dentally challenged reality. Our orange image looked a trifle banded, our wine bottle wasn't terribly sharp, and our Uniformity test for black showed significant backlight bleed-through. At \$625, the CL-174 just isn't worth it.

Bringing up the rear is the NEC MultiSync LCD1760NX. Besides having a bad case of beige-slab syndrome, it performed the worst of all in our Levels tests, failing to recognize colors and grays on the darker end of the spectrum. Pictures of our editors showed fewer facial lines than we know we really have. Colors in our usually luscious orange gravitated to the light and dark ends of the spectrum, ignoring many subtleties in between—this was not a piece of fruit we'd feel safe eating. Surprisingly, however, the wine-and-cheese shot looked good, with the wine bottle coming in rather sharp. Maybe we just needed a drink at this point.



**NEC MultiSync LCD1760NX: It just didn't perform well in our tests.**

## THE ENVELOPE, PLEASE

There you have it. Sharp starred; Apple, Formac, and Sony put in strong supporting performances; Samsung, Princeton Graphic Systems, ViewSonic, and AG Neovo were left waiting in the wings; and Hitachi and NEC bombed. To be fair, if money's not a problem, you'll be happy with any of our top four, and if you primarily surf the Web and write text documents, most of our contestants can play the part adequately. But the "everyone is a winner" mentality doesn't fly either in reality TV or when you can only write one check to one company for one display. So that's our story—and we're sticking to it.



Narasu Rebbapragada, *MacAddict's* news editor, has been staring at LCD displays for so many years that she swears they're beginning to stare back.

## How We Tested

### HOW OUR TESTING SEPARATED THE WINNERS FROM THE LOSERS.

To test our displays, we looked at a slew of image and text files. We also ran a copy of DisplayMate display-evaluation software (\$69, [www.displaymate.com](http://www.displaymate.com)), which contains a battery of image tests designed to push a monitor to its limits. (Since it's a

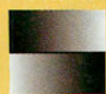
Windows-only app, we ran it using Virtual PC, which did not affect the results.) In consultation with the good folks at DisplayMate Technologies, we chose the following tests upon which to base our evaluations.

#### LEVELS: COLOR



This pattern of ten rows of 25 successively brighter color swatches tests a display's ability to distinguish fine gradations in different hues. We scored the monitors on how many swatches they missed.

#### LEVELS: GRAY



This pattern of 64 shades of gray is similar to the color test, only in gray and with more steps. Duh.

#### UNIFORMITY: WHITE AND BLACK

We also used DisplayMate to present us with an all-white and an all-black screen. The all-white screen showed us how uniformly—and how brightly—a display could illuminate. The all-black screen allowed us to see if a display could show true black, or if it allowed backlighting to create a bluish bleed-through, leading to lower contrast, impaired readability, and color shifts.

#### IMAGE QUALITY: SKIN TONES



In addition to our DisplayMate tests, we also inspected professional photographs of people we know well—ourselves—to check whether the displays reproduced accurate detail and color.

#### IMAGE QUALITY: SUBTLETY



We used a fruity picture of a luscious orange to test whether the displays could pick up subtle gradations of color.

#### IMAGE QUALITY: CONTRAST

A wine-and-cheese glamour shot served as a real-world test for display contrast.

#### IMAGE QUALITY: VIDEO

We used fast-action video—a fight scene from Ang Lee's *Crouching Tiger, Hidden Dragon*—to test how quickly the displays could refresh pixels.

#### VIEWING ANGLE

With our wine-and-cheese image onscreen, we first centered ourselves at a comfortable viewing distance. We then raised ourselves until we detected

a significant change in the image, then noted the distance we were from center. We repeated the process while moving center to right. We assigned ratings based on how far we had moved.

#### CONSTRUCTION: FEATURES, DESIGN, VALUE

Finally, we asked: How many extra features—such as USB ports, speakers, and ergonomic adjustments—does it include? How solidly and elegantly is it built? And how big a bite will it tear out of your wallet?



# offbeat shareware

**There's a world of crazy software out there that we betcha didn't know about.**

**I**f you're a true Mac addict, you're probably familiar with shareware greats like GraphicConverter and TinkerTool—and if not, you should be. But did you know there's an app that will keep track of your golf scores? Or shareware that allows you to play MP3s from the Dock? There's even a utility that'll time your contractions when you're in labor. Yep, there's a wide 'n' wacky world of creative shareware out there, compliments of our wide 'n' wacky world of creative shareware developers. Here are some of our favorite off-the-beaten-path apps, ranked on a scale of 1 to 10 by their fun, usefulness, and weirdness factors.

**The OFFBEATOMETER™**  
Official measurer of an app's fun, usefulness, and weirdness levels.  
Approved by the FCMR (Federal Commission on Meter Regulation).



**by Andrew Tokuda**



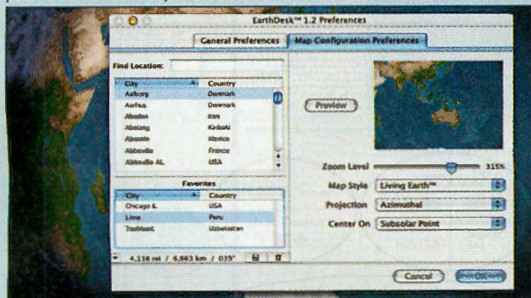
**ON THE  
DISC**

Find all of the shareware featured in this article on the Disc.



## Become an Astronaut

EarthDesk, \$19.95, [www.timepalette.com/earthdesk.html](http://www.timepalette.com/earthdesk.html), OS 9 and OS X



Ever wonder what God sees before he—or she or it—goes to bed at night? Now we know...

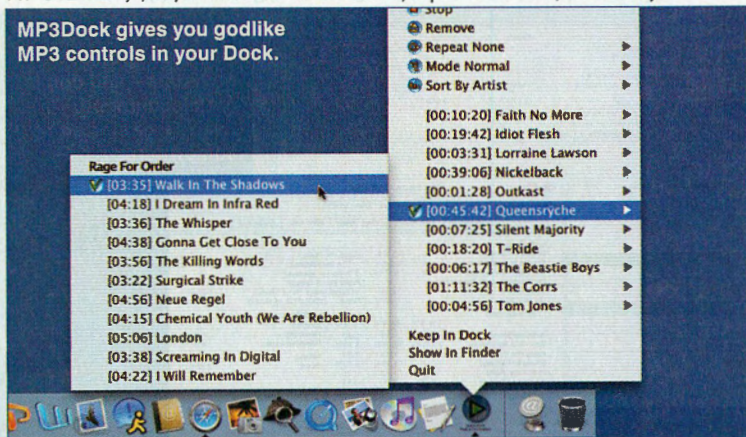
If you're like us, when you were young you probably had dreams of becoming an astronaut. While NASA may not be knocking at your door these days, you can at least check out the view from above with EarthDesk. This utility replaces your desktop image with a constantly rotating and updating map of the world, complete with correct sun and moon illumination. Very cool.



## It's Music to My Dock!

MP3 Dock, \$10, [www.softwarium.com/mp3dock.html](http://www.softwarium.com/mp3dock.html), OS X only

MP3Dock gives you godlike MP3 controls in your Dock.

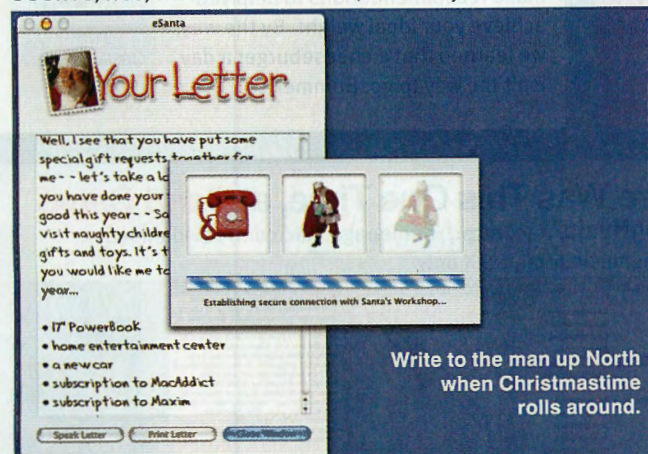


MP3 Dock lets you use the Dock as an MP3 player, but goes beyond what iTunes' Dock options offer (basically little more than starting, stopping, and skipping songs). By clicking MP3 Dock's Dock icon (really, we wish there was an easier way to say that), you can navigate through your entire MP3 collection—sorted by album, artist name, folder, or file name—and play the song you want. You can even set the play order and repeat mode.



## There is a Santa Claus!

eSanta, free, [www.ifthensoft.com](http://www.ifthensoft.com), OS X only



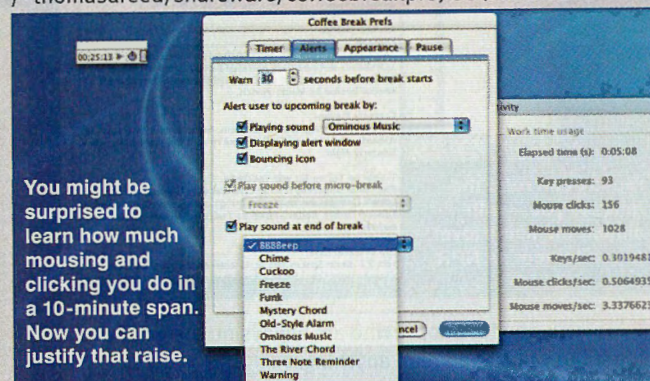
Write to the man up North when Christmastime rolls around.

It's never too early to start thinking about Christmas and what yummy new Mac things you want this year. eSanta is a Christmas wish list and direct line to good ol' Saint Nick himself. Type in the presents you wish...we mean the ones your kids wish to receive for the holidays, and send an email immediately to Santa. Wait a little bit, and you'll get a personally signed letter from the jolly man up North. Wow! There really is a Santa Claus! (If you can't wait for December, you can download eSanta from [www.versiontracker.com](http://www.versiontracker.com). If you can wait, If Then Software says that eSanta will be back up on its site come holiday time.)



## Take More Coffee Breaks

Coffee Break Pro, \$20, <http://home.earthlink.net/~thomasareed/shareware/coffeebreakpro>, OS 9 and OS X



You might be surprised to learn how much mousing and clicking you do in a 10-minute span. Now you can justify that raise.

You love your Mac and can't tear yourself away. But your health is almost as important as your Mac. If you're clicking, mousing, and typing for hours on end, you could fall victim to a repetitive stress injury. That is, unless you use Coffee Break Pro, which reminds you to take periodic breaks and counts your mouse movements, button clicks, and keystrokes. Now you can see how much work your fingers are doing every time you use your Mac.

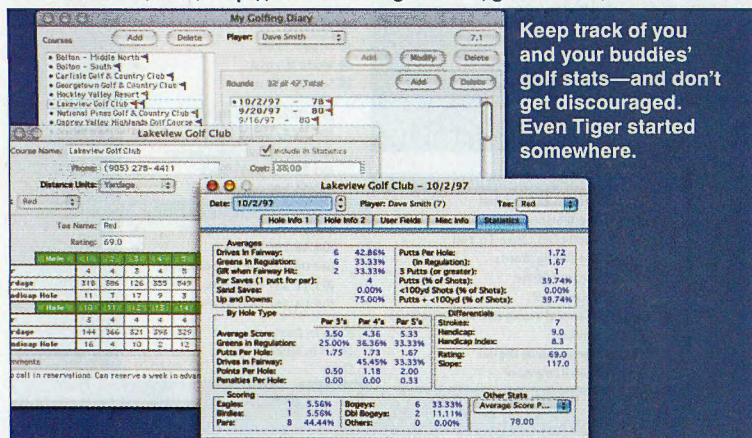




# offbeat

## For the Serious Golfer

GolfMeister, \$20, <http://members.rogers.com/golfmeister>, OS 9 and OS X

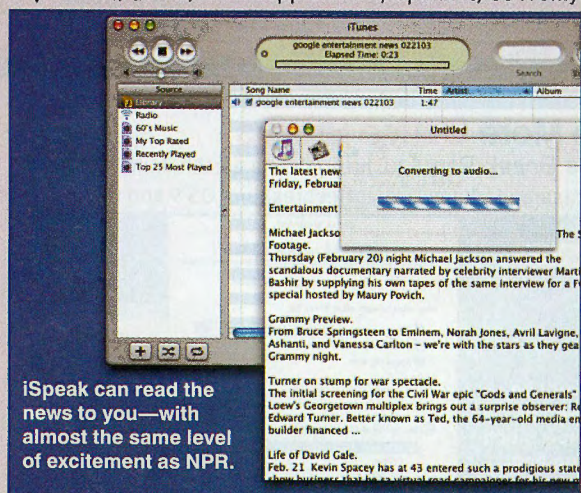


If you're a golfer who's feeling extracompetitive, try out GolfMeister, which keeps track of and analyzes golf scores. It's great for keeping records of which losers owe you pizza and beer. GolfMeister also keeps track of a lot of stats, including greens in regulation, drives in fairway, eagles, birdies, and more.

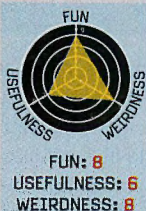


## Read Me a Story

iSpeak It, \$8.95, [www.zapptek.com/ispeak-it](http://www.zapptek.com/ispeak-it), OS X only

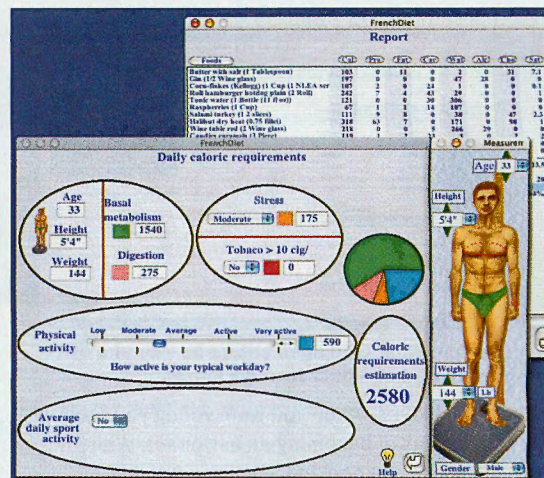


This is an app for people who are always on the go and too busy to sit and read anything. iSpeak It will turn any text document into an MP3 file, which you can listen to at your leisure. But that's just the beginning. This app can also load weather forecasts, driving directions, and news stories from Google. Just prepare yourself to spend hours listening to whatever computerized voice you've chosen for your system.



## Watch What You Eat

FrenchDiet, \$30, [www.diondine.com](http://www.diondine.com), OS 9 and OS X



We want the Mac community to be a happy, healthy bunch, so it's important that you eat right. Now that we've gotten the morning health awareness message out of the way, let's talk about FrenchDiet, a nutritional analysis program that helps you make smart food choices. Enter your personal info, such as height and weight, activity level (or lack thereof), and so on. Then enter the food you eat. FrenchDiet can make recommendations to help you achieve your ideal weight. By the way, we learned that a cheeseburger a day isn't the way to go. Bummer.



## There Was This One Time, at Band Camp

MakingMusic, free, <http://homepage.mac.com/davidahmed/makingmusic.html>, OS X only

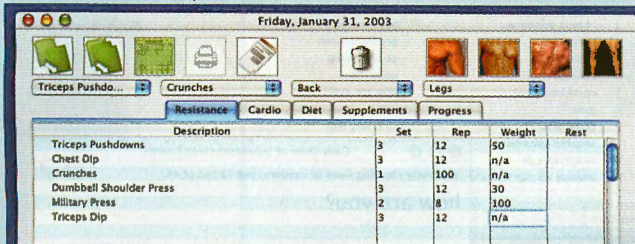


Do you know what a sackbut is? If you have MakingMusic, you know that no one will be playing this Renaissance trombone in any upcoming Metallica concerts—we hope. MakingMusic is a database of musical instruments. Simply double-click an instrument name in the left column to load an image, description, and sound sample. With a constantly growing database of musical instruments (127 as of this writing), you'll have one of the coolest online music encyclopedias you never had to pay for.





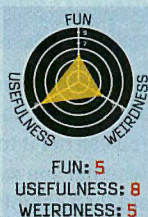
**Get Six-Pack Abs!** (We Always Wanted to Say That)  
Muscle, \$10, <http://homepage.mac.com/jamieoutlaw/software>, OS X only



Description	Set	Rep	Weight	Rest
Triceps Pushdowns	3	12	50	
Chest Dip	3	12	n/a	
Crunches	1	100	n/a	
Dumbbell Shoulder Press	3	12	30	
Military Press	2	8	100	
Triceps Dip	3	12	n/a	

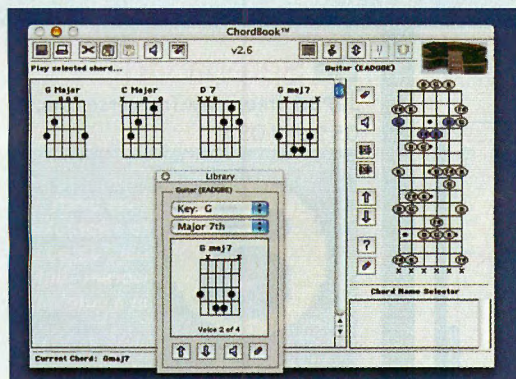
With a little work and persistence, you can look like the guy in the pictures (if you really want to, that is).

If you find yourself covering more and more of the chair you're sitting on, go pump some iron, then come back and launch Muscle. This fitness journal keeps track of your resistance exercises (sets, reps, and weight) in your quest for bigger biceps. You can also enter information about your cardiovascular workouts, food intake, and supplements, and record your results in a progress chart. Now go get 'em, Arnold!



## Cheap Guitar Lessons

ChordBook, \$15, [www.drdsdigital.com/cb.html](http://www.drdsdigital.com/cb.html), OS 9 and OS X

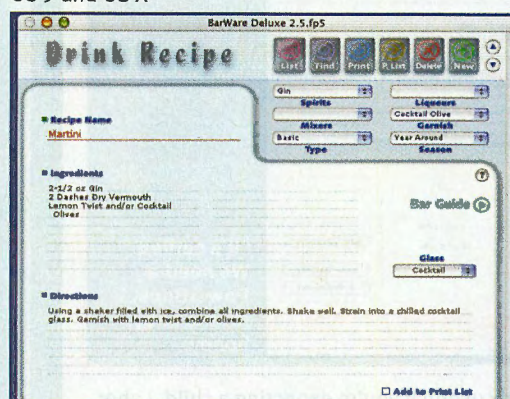


ChordBook will help you come up with that jazz variation of "Smells Like Teen Spirit" that's been brewing in your brain.

Guitar players, get your chord chops in shape with ChordBook. This axman's or axwoman's utility will help you find the best fingering for guitar chords. Choose a note, like G, and the kind of chord you want to play, such as a G Dominant 7th, then click the up- and down-arrow keys to see the different fingerings. You can also select the speaker icon to hear the individual notes that make up the chord, or click the pencil icon to draw the chord diagram. ChordBook handles alternate tunings as well. So what're you waiting for? Start fingering! (Ooh, that came out wrong.)



**The Bartender's Encyclopedia Britannica**  
BarWare Deluxe, \$12.95, [www.digitalfriedchicken.com](http://www.digitalfriedchicken.com), OS 9 and OS X



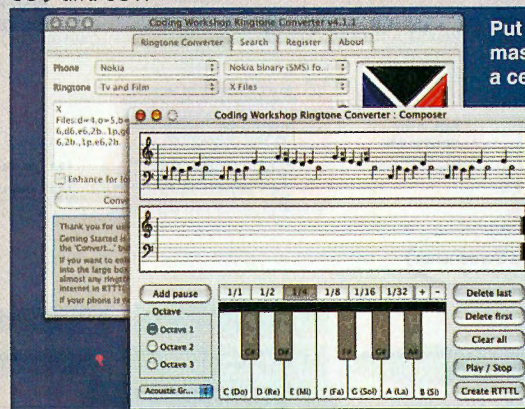
You can keep 775 drink recipes on your desktop. Kinda makes you wish virtual reality was a little less virtual and a bit more real.

Do you still live vicariously through Tom Cruise in the movie *Cocktail*? Let's hope not. Still, BarWare Deluxe can help you with your drink-mixing know-how. The search function can help you find recipes for all kinds of drinks, and the pop-up categories locate recipes based on ingredients. There's also a Bar Guide, where bartender wannabes can find useful info such as the number of ounces in a shot and what a highball glass looks like. BarWare Deluxe comes with 775 recipes, but if that isn't enough, you can add an unlimited number of drink recipes to its database.



## Change Your Cell Phone Ring

Ringtone Converter X, \$18.95, [www.ringtonesoftware.com](http://www.ringtonesoftware.com), OS 9 and OS X



Put your musical masterpiece on a cell phone.

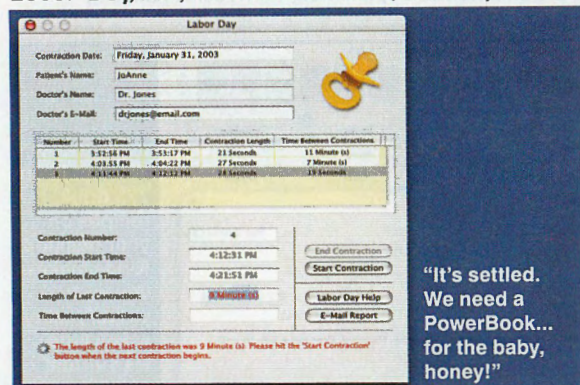
We're not sure if this is for composers or for chatter bugs, but Ringtone Converter can convert the cell-phone ring tones you can find on the Internet in RTTTL or Nokia Keypress formats to one you own cell phone accepts. There's a caveat: You must have a cell phone that the software supports—check the list at [www.ringtonesoftware.com/phones.html](http://www.ringtonesoftware.com/phones.html). You can also choose from a bunch of included melodies such as the theme from *The X-Files* (gotta have that!). If you're musically inclined, you can even compose your own tune.





## Who Said Labor Pains Aren't Fun?

Labor Day, free, [www.ifthensoft.com](http://www.ifthensoft.com), OS X only



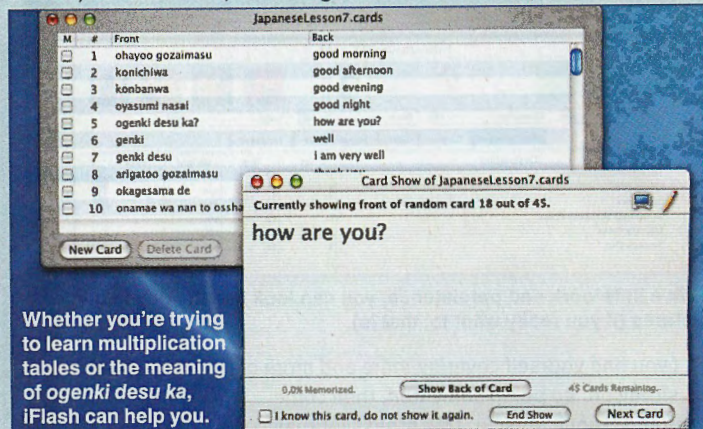
"It's settled.  
We need a  
PowerBook...  
for the baby,  
honey!"

This one is only useful if you're expecting a child. Labor Day records the length of contractions and the time between them. All you have to do is click a button to start timing (if only labor were that simple). When you decide it's time, you can even email the report to your doctor. OK, so a pen, paper, and stopwatch might be an equally convenient set of tools for the job, but at least you can tell people that a Mac helped deliver your baby.



## Flash-Card Flashbacks

iFlash, donationware, [www.mcgavern.com](http://www.mcgavern.com), OS X only



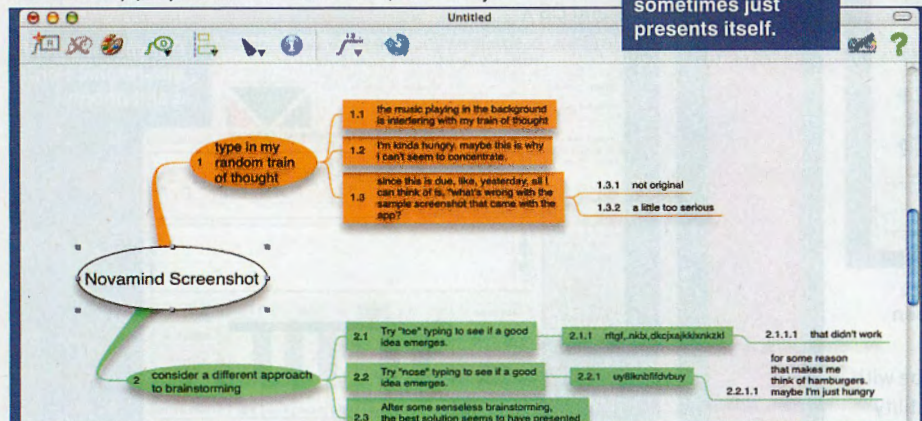
Whether you're trying  
to learn multiplication  
tables or the meaning  
of *ogenki desu ka*,  
iFlash can help you.

When it comes to memorization, it's hard to beat good old-fashioned flash cards. iFlash is a free virtual flash-card maker. You can set it to show cards in random order. You can also choose whether you want to show the front or back of the card (or a combination, chosen at random). For example, if you're learning Spanish, you can have iFlash display the English side for you to guess the Spanish counterpart, or vice versa. You can also check off the cards you've aced so you can concentrate on the ones you're having trouble with.



## Let Your Mac Do Your Thinking

NovaMind, \$59, [www.nova-mind.com](http://www.nova-mind.com), OS X only

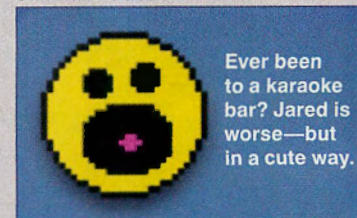


Scatterbrained? Here's a tool for organizing your complex thought patterns into a concise, organized map (a process called *mind mapping*). The software is good for brainstorming, when you want to get your ideas down as fast as you can think. Start with a central idea and create *branches* (graphical representations of your train of thought). You'll end up with a map of your ideas, which you can rearrange into a concise form. The concept might sound weird if you've never done mind mapping (hence our weirdness rating of 9), but once you use it, you may find it's an indispensable tool.



## Be Serenaded

Jared, free, [www.freeverse.com](http://www.freeverse.com), OS 9 and OS X



No shareware article would be complete without mentioning the ultimate must-have-but-don't-need title, Jared. This little yellow face sings on your desktop or in your Dock. Jared has even appeared in a Blockbuster Video commercial, although don't let that fool you—his talent is questionable. He has received an Aqua face-lift since his Classic days, but old-schoolers can switch Jared back to the pixelated yellow orb that made him famous.





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ALLIED ASSAULT

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CENTRAL EUROPE

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EXPANSION PACK

## LAUNCH YOUR NEXT ASSAULT.

- All-new Russian and British weapons including smoke grenades and heavy artillery.
- Nine single-player levels from Normandy to Berlin.
- 12 new multiplayer maps spanning the European Theatre of Operations.



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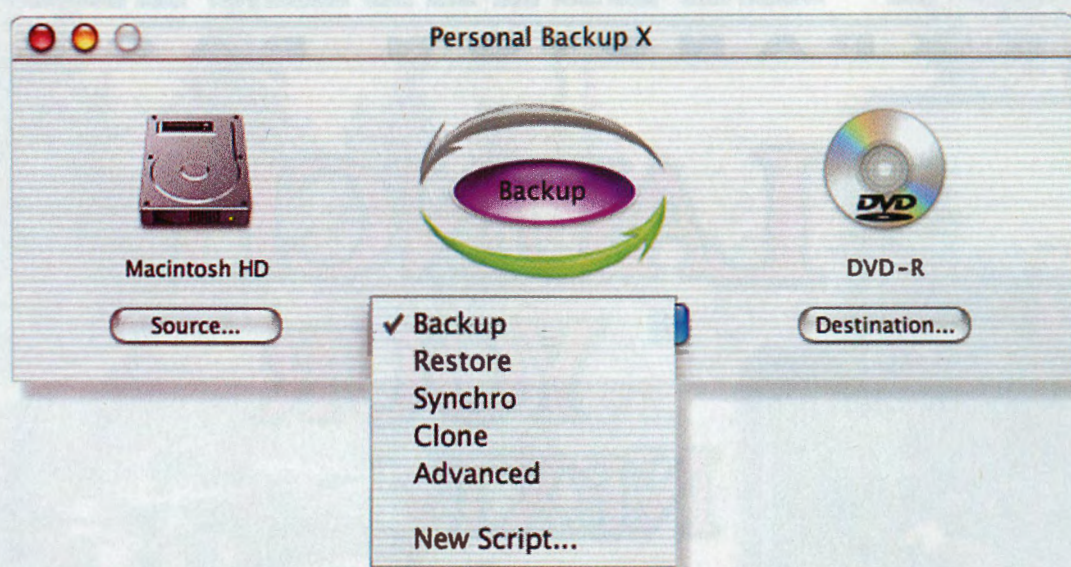


Violence

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# When was the last time you backed up your files?



**Back up, restore, clone and synchronize  
with one single tool!**

**new**



## Intego Personal Backup X

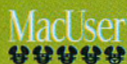
This native Mac OS X program, fully compatible with Jaguar, was designed so both beginners and experts can back up, restore, synchronize and clone their data simply and easily.

Intego Personal Backup X is stable, reliable and affordable, and is the only tool you need to make sure your data is safe.

Back up your files today, and never worry about losing data again.



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Compatible with  
Mac OS X or later.



Compatible with  
Mac OS 9 or earlier.



If we were  
shopping for this  
type of product,  
this is the one  
we'd buy.

## MacAddict RATINGS



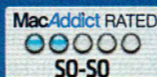
You'll be  
blown away.



You'll be  
impressed.



You'll be  
satisfied.



You'll be  
disappointed.



You'll be  
pissed off.

When it rains, it pours. This month we're thoroughly soaked in new Apple hardware, including the biggest-ever PowerBook, the fastest-ever Power Mac tower (pictured here), and another 17-inch, flat-panel iMac with a milestone or two under its belt—it's the first iMac to break the gigahertz barrier, and the first consumer Mac to adopt the next-generation system architecture introduced with the Xserve. What'd we do with all those Macs? Why, we loaded them up with the likes of FreeHand MX and Tony Hawk's Pro Skater 3, then locked it all down with our new favorite gizmo—the Puppy Suite fingerprint-authentication security system.



# 17-Inch PowerBook G4

## NOTEBOOK

**T**his sucker be *big!* That's the first thought that crossed our minds as we eased Apple's new 17-inch PowerBook G4 out of its protective packaging. "It looks like a portable Xserve," cracked one especially wiseass editor. This new aluminum PowerBook may have reached—or possibly exceeded—the reasonable size limit of a portable computer.

There's a lot to be said in favor of Jobs's Big Boy: It's the fastest PowerBook we've ever tested; its construction is both muscular and elegant; its screen is big, bright, and beautiful—but whether you decide to drop a cool \$3,299 on one should be based on how you feel about accepting a 15.4-by-10.2-by-1.0-inch, 6.8-pound leviathan into your mobile life.

This laptop is not for everyone. If you're a garden-variety road warrior who's simply taking your word processing, spreadsheet wrangling, and emailing on the road, the 17-inch PowerBook G4 is overkill. If, however, you need a portable machine for

## If you're a garden-variety road warrior, the 17-inch PowerBook G4 is overkill.

image editing, video production, or audio processing, the extra oomph and Texas-size screen acreage may well be worth getting a membership in 24 Hour Fitness.

Or you may simply want to replace your desktop Mac with a big-screen PowerBook that you can haul back and forth from work to home, size be damned. After all, in these recessionary times, we're all working both at the office during the day and at home at night, right? It's highly convenient to have your office and home Mac be one and the same.

If you do decide that size doesn't matter, you'll be happy to know that the 17-inch PowerBook G4—though not flawless—is one fine machine. Its scratch-resistant anodized aluminum case surrounds a sturdy magnesium frame and a lid rigid enough to protect the PowerBook's way-big TFT LCD



### Is it gargantuan, humongous, Brobdingnagian, or all three combined?

screen from warping and cracking. The lid's hinge—don't ignore the fine touches—is a marvel of detailed engineering; its helical counter-balance spring tensioner keeps it solidly secure at any angle, and its drop-down construction (à la iBook) allows the mongo screen to be only a wee bit taller than that of the 15-inch TiBook. Yes, it'll fit on your coach-class tray table. Barely.

The 17-incher's keyboard is a classic case of good news and bad news. The good: This is easily the best-feeling keyboard of any PowerBook we've had the pleasure to stroke. The keys are solidly responsive, have a good range of travel, and are easy to read—except for that weird upside-down-W between the N and the comma.

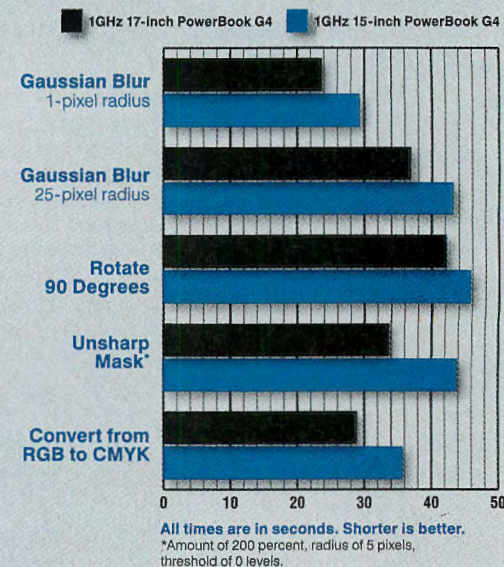
Even better, when the lights go down, the keys—actually, just the letters on the keys—automatically light up, thanks to ambient light sensors hidden in each speaker grille and a web of 270 fiber-optic threads underlying the keyboard. This feature may sound like a mere gee-whiz gimmick, but in our experience, unassisted low-light typing often turns "Apple Computer" into "S[;]r Vp,[i]yrt." What's more, if you're using a 17-inch PowerBook G4 to run your audio mix in a dark club

when you're opening for BT (check out "Mac Maestro," March/02, p31), being able to see your keyboard is essential.

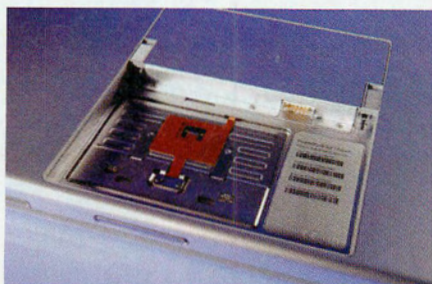
But there's bad news as well: Apple engineers placed the keyboard up against the screen—a design choice that works fine

## Equals Aren't

**T**he top-of-the-line 15-inch PowerBook has a 1GHz G4 processor. The new 17-inch PowerBook has a 1GHz G4 processor. They should perform equally well, right? Wrong. Thanks to its fast 167MHz system bus and new system architecture, the 17-incher breezed through our Photoshop 7 test suite up to 30 percent faster than the TiBook.



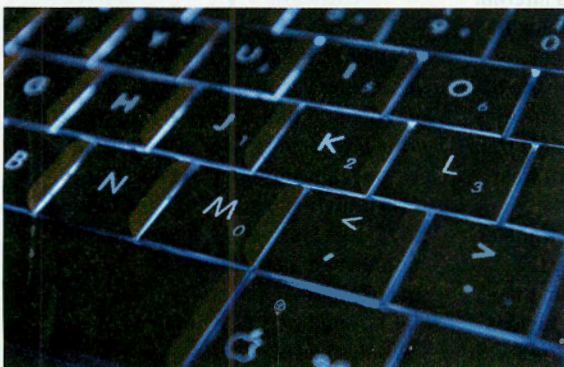




Removing the battery reveals the underside of the trackpad. In the compartment next to the battery well, you can upgrade RAM to 1GB.



2.6 vertical centimeters never looked so good.



This is our favorite keyboard in the history of keyboards.

for smaller PowerBooks, but doesn't work for the vast expanses of the 17-inch PowerBook G4. With the keyboard so far from the front of the machine, your wrists scrape against the PowerBook's front edge while you're typing. Annoying. Really annoying.

Oh, and while we're carping, we'd like to mention that the latch that releases the PowerBook's lid is strictly from nowhere, daddy-o. It takes a concerted effort to finger it exactly the way it demands to be fingered before it'll allow the lid to spring free. Apple PR calls it a "security enhancement"—we call it a mistake.

The keyboard's compatriot, the trackpad, is better behaved. Its driver software, accessed through the System Preferences' Mouse pane, includes an Ignore Trackpad While Typing option that Apple describes as a "palm rejection" capability—if you

brush the trackpad with your hand while it's engaged, your cursor won't jump erratically. If you enable tapping and double-tapping to emulate clicking and double-clicking, however, prepare to tap rather hard on the trackpad to work your will.

The 17-inch PowerBook G4 has ports for days. On the left (front to back) you'll find audio out and in, a PC Card slot, USB, a V.92 modem, power, and a Kensington-style security slot. On the right: USB, FireWire 400, FireWire 800, 10/100/1,000Base-T Ethernet, S-Video, and DVI. On the back: nothing.

The two USB ports are notable for the fact that each has its own full-bandwidth, full-power *root hub*. The Ethernet port—like that on most Macs released in the past couple of years—is smart enough to know not only whether it's connected to a slow, fast, or Gigabit Ethernet network, but also whether it needs to emulate a straight-through or crossover connection.

The 17-inch PowerBook G4 is also a full-fledged member of the brave new world of wireless connectivity, with both 802.11g-compliant AirPort Extreme and Bluetooth onboard (see "Extreme Wireless," May/03, p20). Thanks to its screen-flanking antennae, the 17-incher gets far better AirPort range than any previous portable. Walking away from the

Base Station, we got a good 50 feet farther (both indoors and out) with the 17-inch PowerBook than we did with a TiBook; even the new 12-inch PowerBook—which has the same integrated antennae—dropped the signal about 40 feet before the jumbo model did. Bluetooth performance was, well, Bluetooth performance. It works.

The 17-inch PowerBook's audio abilities, based on Apple's Snapper audio circuitry, provide surprisingly hearty sound for a laptop, but its tiny—though not tinny—speakers make both bass and treble somewhat illusory. One advantage of the extreme width of this unit is that it has far better stereo separation than most notebooks.

Video performance impresses as well. An nVidia GeForce4 440 Go video chip with 64MB of DDR SDRAM on an AGP 4X

bus allows this PowerBook to push pixels as well as any Apple laptop to date. It also supports six different display possibilities: the onboard 1,440-by-900-pixel, 16:10, 100-dpi LCD display; the DVI port; ADC, using Apple's \$99 DVI-to-ADC adapter; VGA, using the supplied DVI-to-VGA adapter; the S-Video port; and a supplied S-Video-to-composite-video adapter. You can connect an external monitor as a second display with a resolution of up to 2,048 by 1,536 at 24-bit color, as a mirrored display, or as a primary display with the 17-inch PowerBook G4's lid closed.

Although the PowerBook's hard drive sits on a fast Ultra ATA/100 bus, at 4,200 rpm it's rather lackadaisical (compared to the d2 200GB FireWire 800 drive; see our review on p47). Also quite relaxed is its SuperDrive, which—contrary to early reports—is limited to 1X speed. According to an Apple spokesperson, although some of its suppliers' drives can achieve 2X write speeds, Apple decided to keep every SuperDrive throttled down to 1X, the lowest common denominator. Damn.

Battery power is good, but not great: 55 watt-hours as compared to the TiBook battery's 61—and with such a humongous screen to light, we experienced just 3-hour battery longevity in normal use.

Where the 1GHz 17-inch PowerBook G4 does shine, however, is in good old-fashioned butt-kicking speed. Our tests showed that the new PowerBook handles common Photoshop tasks up to 30 percent faster than a 1GHz TiBook (see "Equals Aren't," p42), and can convert a 2GB DV file to MPEG-4 over 60 percent faster. Part of the credit goes to the 17-incher's 167MHz system bus (25 percent faster than the TiBook's 133MHz), and part to its DDR SDRAM system architecture and new Intrepid memory controller and I/O chip, features it shares with the 12-inch PowerBook (see *Reviews*, Apr/03, p46).

Overall, this is one interesting machine. Too big to be a notebook. Fast. Great for those who need high-performance mobility. Solid. An ideal desktop replacement. Gorgeous. Encumbered by slow storage. Expensive.

The bottom line? If you want to buy us one, we'd be more than happy to take it off your hands.—Rik Myslewski

**COMPANY:** Apple

**CONTACT:** 800-795-1000, 167MHz system bus, 60GB Ultra ATA/100 hard drive, nVidia GeForce4 440 Go 4X AGP graphics with 64MB DDR SDRAM, 10/100/1,000Base-T

**PRICE:** \$3,299

**SPECS:** 1GHz G4, 1MB L3 cache, 512MB PC2700 DDR SDRAM, Ethernet, AirPort Extreme, Bluetooth, V.92 modem, SuperDrive

**GOOD NEWS:** Huge. Fast. Bright display. Solid construction. Backlit keyboard. Great AirPort range.

**BAD NEWS:** Huge. Poorly placed keyboard. Hard-to-open screen latch. 1X DVD-R SuperDrive.

**MacAddict RATED**  
  
**GREAT**





# Dual 1.42GHz Power Mac

## G4 TOWER

When Apple's new top-of-the-line pro G4 tower, the Dual 1.42GHz Power Mac, arrived in our lab, our first concern wasn't whether its faster processor and 2MB-per-processor L3 caches made it noticeably snappier than its predecessors, or whether its new FireWire 800 port gave file transfers an appreciable boost. No, it was whether—unlike with first-generation Mirrored Drive Door Power Macs—you could actually hear yourself think when the big ol' beast was running.

After firing it up, we're happy to report that although the new power supply in the Dual 1.42GHz Power Mac isn't exactly what you'd call whisper-quiet, it's a vast improvement. Thanks, Apple, for listening—even though we're surprised you could hear the chorus of complaints over the noise of the original fans.

After basking for a moment in the serenity of the new Dualie's peace and quiet, we put it through its paces. Its raw performance is not a vast leap ahead of its slightly slower siblings', but we saw an appreciable improvement in most tasks.

Compared to an original Mirrored Drive Door Dual 1GHz Power Mac when running Photoshop tasks, for example, it performed 1-pixel Gaussian blurs in essentially the same amount of time, while its RGB-to-CMYK conversions and unsharp-mask filters were noticeably snappier (see "Step...by...Step," right).

Video rendering also benefited incrementally from the Dual 1.42GHz's enhancements. When we used QuickTime Pro 6 to export a 2GB DV file as MPEG-

4, the new Dualie finished the task in 6 minutes and 32 seconds; the Dual 1GHz took 6 minutes and 50 seconds to export the same file. Not a big deal, but appreciated. (To compare to an earlier system design, it took our friendly neighborhood QuickSilver Dual 1GHz Power Mac a full 8 minutes and 36 seconds to accomplish the same task.)

More impressive was the speed boost supplied by the Dual 1.42GHz's new single FireWire 800 port. We used a just-released LaCie d2 200GB FireWire 800 drive for our tests (see *Reviews*, p47). When we plugged the d2 into the FireWire 800 port, writing a 2GB file to the d2 from the Dualie's internal 7,200-rpm, 120GB Ultra ATA/100 Seagate Barracuda V was well over 40 percent faster than the same operation with the d2 plugged into one of the Dual's two FireWire 400 ports. When we read the same file from the d2 to the Dual, the improvement was just under 30 percent.

As might be guessed, small-file transfer speeds—which are limited more by the capabilities of the operating system than the drive and its cabling—showed far less improvement: Reading a folder stuffed with



PHOTOGRAPHY BY MARK MADEO

**Go ahead, put your ear to the page. Quieter, isn't it?**

50MB of 4K files from the d2 to the Dual was a hair over 10 percent faster using FireWire 800 than FireWire 400; when writing the same folder to the d2, we saw no noticeable difference.

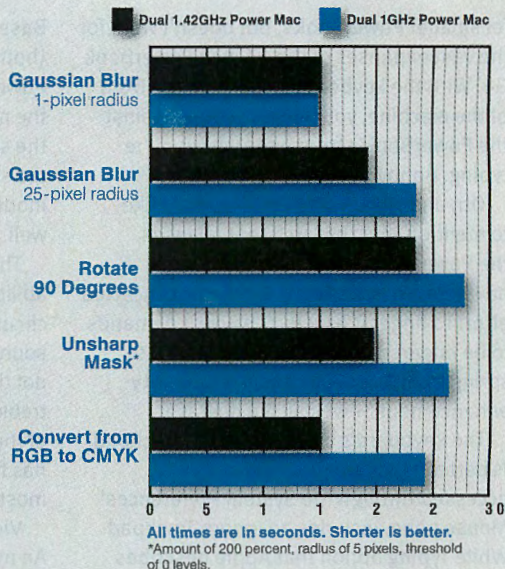
No fanfare, no shouting—the Dual 1.42GHz is just a solid, incremental improvement in the Power Mac line, with a cool new FireWire port. All in all, this Power Mac is, shall we say, a quiet success.

—Rik Myslewski

## Step...by...Step

The Dual 1.42GHz Power Mac not only takes a small step in processor performance, but also ups the silicon ante by doubling each processor's L3 cache to 2MB. We tested it against a first-generation Mirrored Drive Door Dual 1GHz Power Mac to better show the incremental progress between generations. The Dual 1.25GHz falls between these two in performance.

We tested in Photoshop 7 using a 115MB PSD file. Both Power Macs were equipped with 512MB of RAM. The Dual 1GHz Power Mac was running Mac OS 10.2, the OS with which it shipped. The Dual 1.42GHz Power Mac was running Mac OS 10.2.4, with which it shipped.



**It may look like Sim City, but this stack of copper plates is actually a heat sink.**



**COMPANY:** Apple  
**CONTACT:** 800-795-1000 or 408-996-1010, [www.apple.com](http://www.apple.com)  
**PRICE:** \$2,699

**SPECS:** Dual 1.42GHz G4 processors, each with 256K on-chip L2 cache and 2MB L3 cache; 167MHz system bus; 512MB PC2700 DDR SDRAM; 120GB ATA/100 hard drive; SuperDrive; 64MB ATI Radeon 9000 Pro graphics card

**GOOD NEWS:** Fast. Quiet(er). Highly expandable. FireWire 800. Bluetooth and AirPort Extreme ready.  
**BAD NEWS:** Processor's design doesn't take full advantage of DDR SDRAM. Still a bit loud.

**MacAddict RATED**  
**GREAT**



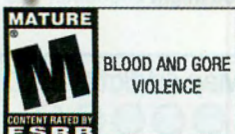


# Unreal<sup>®</sup> TOURNAMENT 2003

**THE TOURNAMENT RETURNS TO MACINTOSH THIS SPRING**



[www.macsoftgames.com](http://www.macsoftgames.com)



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# 1GHz iMac

## 17-INCH LCD G4 IMAC

With its beautiful 17-inch LCD and mighty 1GHz G4 processor, the latest iMac does its family proud. More than just a speed-bumped version of the previous (800MHz) iMac G4, this one includes some of the next-generation technologies (such as DDR RAM and support for Bluetooth and AirPort Extreme networking) but omits others (such as FireWire 800); unfortunately, though, some of its quirks are starting to grow on us—in a bad way.

The iMac still ships with 256MB of RAM (with the same 1GB total RAM capacity)—but the RAM is the higher-performance DDR variety (PC2100 at 266MHz). Backing up the faster RAM is a 133MHz system bus (previously 100MHz) and a bigger, faster storage system—80GB of Ultra ATA/100 (previously 60GB of Ultra ATA/66) on a 7,200-rpm drive—just the ticket for home-iMovie production. This iMac is also primed for the next generation of wireless networking, with built-in support for an AirPort Extreme card (\$99 from Apple) and Bluetooth support via an internal module (a \$50 build-to-order option) or

### The honeymoon's over, but we're still in love.

an external dongle (\$49.95 from Apple), which you can purchase later. Throw in an 8X-by-4X SuperDrive (Pioneer's DVR-105 in our test unit), which reads and burns DVDs twice as fast as its predecessor did, and the desktop multimedia revolution is in full swing. We only wish that SuperDrive was double-speed all around; the CD specs of 16X (write)/8X (rewrite)/32X (read) remain unimpressive.

In terms of software, the iMac comes preloaded with a generous consumer bundle for multimedia (iLife's iDVD, iMovie, iPhoto, and iTunes, plus Felt Tip Software's Sound Studio for entry-level audio production); productivity (apps like AppleWorks 6, FaxstfX, Quicken 2003, and World Book 2003); and fun (games like Otto Matic and Deimos Rising).

We still love the iMac G4, but the



PHOTOGRAPH BY MARK MADEO

### iMac, uMac, we all scream for a 1GHz iMac.

proverbial honeymoon is over; in the 15 months we've had one in the office, certain less-than-endearing features have become truly annoying (although on a good day, they still seem pretty trivial).

For starters, the screen is slightly crooked—looked at straight on, the display tilts about a degree to the left, as we noted in our first iMac G4 review (May/02, p46). Much as we dig the extra screen real estate brought by that 17-inch LCD, those added inches also make the screen's tilt more apparent. Once we moved the iMac to a desk where it wasn't directly juxtaposed against arrow-straight window blinds, the crooked screen never really bothered us—but knowing it's not perfect still does.

Additionally, the iMac is all about space efficiency: the all-in-one design, the petite footprint, the ergonomically adjustable neck. So who missed the fact that if you put the keyboard right up against the base, it blocks the optical drive door? You have to move the keyboard about half an inch away from the base (or turn the base sideways) to open the optical drive. We'd expect this kind of shortsighted design compromise in a Dell, but not in a Mac (a revised Mac no less—this

problem also plagued the original iMac G4).

Of course, some of the iMac's subtleties grow on us in that good, warm-and-fuzzy way—for instance, when you remove the bottom cover to add RAM or an AirPort card, the screws remain in the cover so you won't lose them. And we're delighted to say that after a year of constant use, our old iMac's screen (albeit 15 inches, not 17) moves just as smoothly and holds its position just as solidly as it did the day it arrived in our office—that's reassuring.

You always expect more from the ones you love, right? That's our motto; we love the LCD iMac enough to accommodate its flaws, but not enough to overlook them.

—Niko Coucouvanis



If your desk is really small, you might encounter this little door-jam problem.



**COMPANY:** Apple

**CONTACT:** 800-795-1000 or 408-996-1010, www.apple.com

**PRICE:** \$1,999

**SPECS:** 1GHz PowerPC G4 processor with 256K of Level 2 cache, 256MB SDRAM, 80GB ATA/100 hard drive, nVidia GeForce4 MX with 32MB VRAM, SuperDrive, Apple Pro Speakers

**GOOD NEWS:** Totally adjustable screen. Great software bundle. Good speakers included.

**BAD NEWS:** Screen isn't quite level. Soft keyboard. CD drive is slow.

MacAddict RATED





# d2 200GB

FIREWIRE 800 DESKTOP  
HARD DRIVE

FireWire 800 drives are finally here—and if LaCie's d2 200GB FireWire 800 drive is any indication of what they have to offer, we welcome them with open arms.

When we tested the d2 attached to the FireWire 800 port of a brand-spanking-new Dual 1.42GHz Power Mac, our transfers of 2GB files from the Power Mac to the d2 were well over 40 percent faster than when we attached it to the FireWire 400 port; transfers in the opposite direction were nearly 30 percent faster. Pretty slick.

That said, when we attached the same drive to an equally brand-spanking-new 17-inch PowerBook G4, the PowerBook's



PHOTOGRAPH BY MARK MADEO

LaCie's new FireWire 800 makes a big difference—some of the time.

Mac-tethered d2, and both reading to and writing from the PowerBook, showed essentially no improvement at all.

But there's a twist: The d2 will actually benefit you *more* if you have a slow internal drive: Just load all your big files onto it, and bypass your sluggardly internal drive altogether (see "Opening Photoshop Files," below).

Whatever Mac you plug into, there's no denying it—this small, quiet drive can be a real time-saver if your work involves large files. —Rik Myslewski

## This small, quiet drive can be a real time-saver.

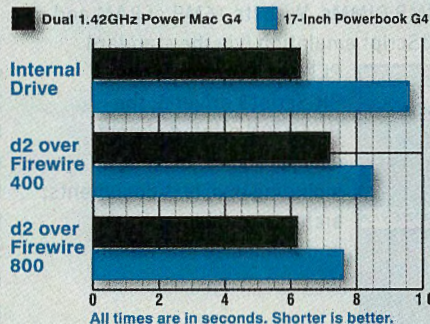
pokey internal Toshiba 4,200-rpm drive choked the d2's performance: In both reads and writes of the same 2GB file, the improvement hovered around a measly 3 percent.

Reading and writing small files on both systems also saw little improvement: The biggest speedup occurred while reading from the d2 to the Power Mac: around 10 percent. Writing small files to the Power

## Opening Photoshop Files

If your Mac is lumbered by a slow internal drive, the LaCie d2 200GB FireWire 800 drive can help. In this test, we used a Dual 1.42GHz Power Mac G4 and a 17-inch PowerBook G4 to open a 115MB Photoshop file on each machine's internal drive and on a d2 drive attached to the Macs' FireWire 800 and 400 ports. The internal drive in the Power Mac is fast; our FireWire 800 test showed little improvement, and FireWire 400 slowed things down. The internal drive in the PowerBook is slow; the file opened noticeably faster over FireWire. A few seconds' improvement may not seem like much, but if you're working with mongo files all day, those seconds add up mighty fast.

We tested using Photoshop 7. Both the Power Mac and the PowerBook were equipped with 512MB of RAM and were running Mac OS 10.2.4.



**COMPANY:** LaCie

**CONTACT:** 503-844-4502, [www.lacie.com](http://www.lacie.com)

**PRICE:** \$469 (200GB), \$599 (250GB)

**REQUIREMENTS:** FireWire-equipped Mac, Mac OS 10.2.4 or later; FireWire 800 port highly recommended

**GOOD NEWS:** Speedily transfers large files to and from systems with fast internal drives. Quickly opens large files. Solidly built. Quiet.

**BAD NEWS:** Not much faster when transferring small files, or when transferring files to and from systems with slow internal drives.

MacAddict RATED  
GREAT

# PUPPY™

Fingerprint Authentication  
for  
Mac OS X



Your fingerprint  
is your password.



[www.PuppySuite.com](http://www.PuppySuite.com)

Pacific Software Publishing, Inc.  
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Bellevue, WA 98005  
TEL: 800-232-3989 Ex. 2  
426-957-0808 Ex. 2  
Email: [sales@pspinc.com](mailto:sales@pspinc.com)

MSRP under \$200. Reseller inquiries welcome.  
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# HL-5070N

## NETWORKABLE LASER PRINTER

When you want to print, you want to print—not track down network addresses and add printers to Mac OS X's Print Center. With printing convenience in mind, Brother has equipped its latest networkable laser printer, the HL-5070N, with the closest thing there is to plug-and-play networking: support for Rendezvous, Apple's autodiscovery networking technology.

The HL-5070N comes with a CD containing individual installers for setting up Mac OS 9 and Mac OS X systems that have the appropriate drivers for network and USB use. The installers walk you through every step, from plugging in the printer to configuring the built-in print

### Makes network printing a total no-brainer.

server via a Web browser (hint: enable Rendezvous Bookmarks in Safari's Preferences, otherwise press the printer's Go button three times to print a status page, wherein you'll find the IP address). After that, we pressed Command-P to print up a Web page and found the printer already loaded in the browser's Printer list, ready for action.

Installing the USB driver is equally painless and likewise doesn't involve Print Center. If you install both the USB and network drivers, however, you'll still want to visit Print Center to reconfigure the printer with more-specific names than the default HL-5070N Series for

USB-connected mode, and Brother HL-5070N Series (BRN\_38727C\_P1\_AT) for networked. We've come to expect USB printers to arrive sans USB cable, but we still hate scrambling for a \$10 connector to use the printer we just shelled out big bucks to buy.

Setting up this printer was such a joy that actually using it was kind of anticlimactic. For starters, it's a laser, so it takes a few seconds (15 to 30) of warm-up time before starting a job. It's also fairly loud, though in typical use we wouldn't park the printer on our desk, as we did for this evaluation (it would fit, though, as it measures a reasonable 15.0 by 15.8 by 9.9 inches).

The HL-5070N's stock 16MB of RAM isn't enough for serious workgroup printing, but you can expand it to 144MB (\$80 for 128MB at press time) via an easy-access slot behind the side cover. The manual suggests Techworks RAM ([www.techworks.com](http://www.techworks.com)) and lists part numbers for 16MB, 32MB, 64MB, and 128MB DIMMs. With its 16MB of RAM and PostScript emulation (via the standard

PCL6 and Brother's own BR-Script3 drivers), the HL-5070N printed almost everything we threw at it, including epic text documents, architectural blueprints, and a massive PDF file. In

**Whoop, there it is! Thanks to its Rendezvous savoir-faire, the HL-5070N practically sets itself up.**



With Brother's Rendezvous-aware HL-5070N, you may never use Mac OS X's Print Center again.

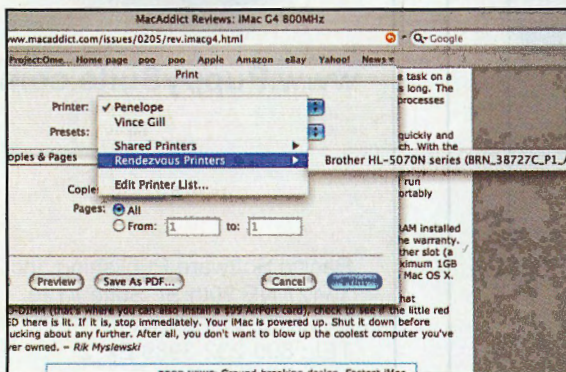
PHOTOGRAPH BY MARK MADEO

fact, 65MB of layers, transparencies, and PostScript fonts didn't stump this printer, though complex pages took some time to materialize (more than 6 minutes for the above-mentioned one-page PDF). Where the HL-5070N failed us was on a six-page Adobe InDesign document; Print Center spun its wheels for almost an hour with the message "Sending the print file" before the job mysteriously disappeared from the queue. The printer had no problem on less-demanding InDesign jobs; it spit out our April issue's table of contents (a three-page, 6.5MB file) in 7 minutes and change.

We burned through the full 300-sheet capacity (250 in the main paper tray, plus 50 in the auxiliary tray) in just under 18 minutes, printing Homer's *Odyssey* in 12-point, double-spaced Courier at 300 dpi. Do the math, and you get just a hair less the claimed 17 pages per minute. Most printers don't come close to their claimed optimal speeds, so we were impressed. Print quality is, as expected, laser-sharp, with smooth gradients.

Using a networked printer generally requires that you first add the printer to your list of available printers via Mac OS X's Print Center (or Mac OS 9's Chooser). Usually it's a simple matter of selecting the printer by name or network address from a list; sometimes you have to enter the network address manually, which is still easy enough. But the HL-5070N's Rendezvous support makes network printing a total no-brainer.

Bottom line: If you need the most Mac OS X-friendly, networkable laser printer available with good performance to boot, this one's for you.—Niko Coucouvanis



**COMPANY:** Brother  
**CONTACT:** 888-879-3232 or  
908-704-1700, [www.brother.com](http://www.brother.com)  
**PRICE:** \$499.99

**REQUIREMENTS:** USB- or Ethernet-equipped  
Mac, Mac OS 8.6 to 9.x or 10.1 or later (10.2.1 or  
later required for Rendezvous support)

**GOOD NEWS:** Practically sets itself up.  
Good speed and quality. Upgradable.  
**BAD NEWS:** Loud. Expensive.

**MacAddict RATED**  
●●●●●  
**SOLID**



# FreeHand MX

## GRAPHICS SOFTWARE

Like any good rivalry, the relationship between Macromedia's FreeHand and Adobe Illustrator is a perpetual match of one-upmanship. FreeHand comes out with new features and interfaces community, and a year or two later the newest Illustrator version contains similar added content with better integration and usability. With FreeHand MX, Macromedia is back on top—for the time being, anyway.

FreeHand MX (FreeHand 11 if you're keeping score) is a powerful vector-based drawing and layout program that combines raster effects with the potential of near photo-realism. This application tackles many chores for print and Web designers, such as logos, buttons, icons, illustrations, and even animation. It's the spackle of the Studio MX family, plugging the gaps

**It's got the fit, finish, and family integration Illustrator still only dreams of.**

between Macromedia's professional tools for drawing, print publication, layout, Web graphics, and Flash animation.

FreeHand's graphics tools are powerful and familiar. For example, the extrude tool

points. The difference is that you can edit and spell-check your text after applying extrude (but not if you apply a rotate or transform as well). Illustrators will find this a powerful tool combined with the Perspective Grid view option. Throw in an enhanced blend tool and an intuitive erase tool (borrowed from Flash), and you're drawing in style.

FreeHand lets you apply multiple attributes and effects to a single object. This is useful, but managing the effects in the new Object panel can get a little confusing. We found ourselves flipping between the Layers and Objects panels too often while creating complex illustrations. A customizable option to combine the abilities of the Object and Layers panels would be incredibly useful.

Another new feature, the connector tool, specializes in connecting objects with straight lines. This tool was made especially for flowcharting. After you add a little zing with the extrude tool, visually connect text boxes and objects with the connector tool, and presto: Web-based presentations actually look decent.

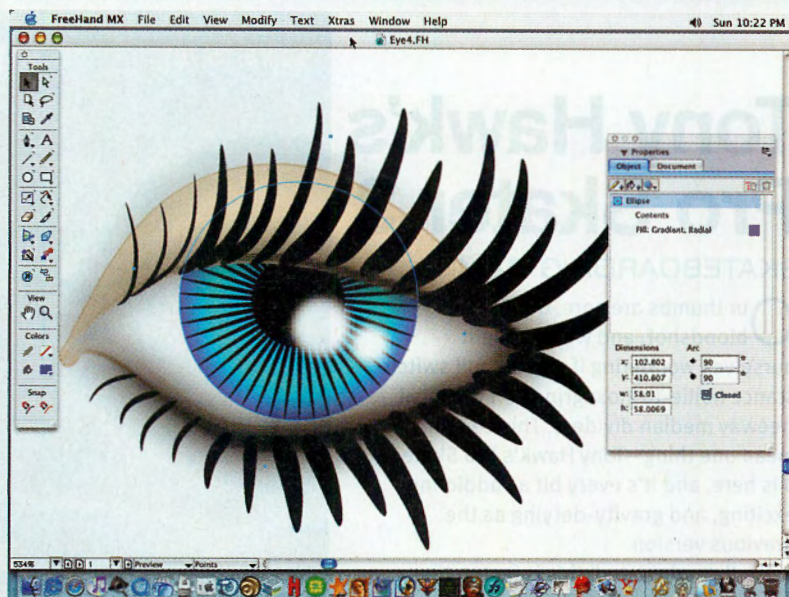
Web designers will appreciate FreeHand's powerful integration with Macromedia's

Flash and Fireworks apps. The new action tool applies ActionScript commands, so you can create storyboards, Flash-style click-throughs, and Web navigation without leaving FreeHand. You can also place, preview, and export your SWF files like a real Flash wizard (without Flash). Furthermore, you can animate without timelines using the Release To Layers effect (based on adding successive layers on top of the bottom layer until the entire layered object appears). FreeHand finally supports imported Alpha channels, so mask and use transparency to your heart's content; and surprise—FreeHand's improved vector transparency transfers to Flash.

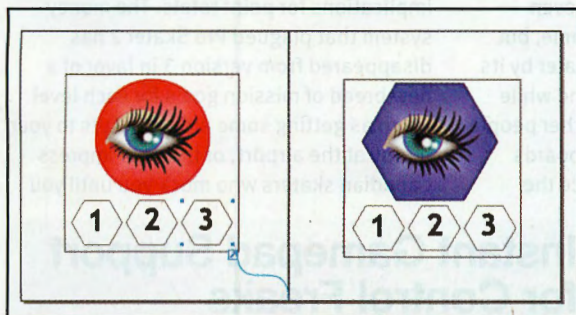
FreeHand MX can also handle heavy-duty publication design. The multiple-page environment includes master-page capabilities and smoothly creates pages based on the original. A global find-and-replace option allows you to replace a specific graphic throughout your FreeHand document. A selectable output area helps you print (or publish to Flash) only those items you want from a chaotic pasteboard.

This is the second Mac OS X-native version of FreeHand, and it's got the fit, finish, and family integration Illustrator still only dreams of. New features and tools, better stability, and seamless program compatibility make FreeHand MX a good contender for future standards.

—Matt Osborn



FreeHand, now MXed like the rest of Macromedia's stable, remains a staple of professional illustrators and graphic artists.



FreeHand's action tool makes it easy to animate your artwork, courtesy of Flash's ActionScript.

is much like the 3D Transform option in KPT Vector Effects or portions of Adobe Dimensions—it has the ability to force



your flat primitives into three dimensions while controlling lighting, rotation, and vanishing

**COMPANY:** Macromedia  
**CONTACT:** 800-457-1774 or  
415-252-2000, [www.macromedia.com](http://www.macromedia.com)  
**PRICE:** \$399, \$99 (upgrade)

**REQUIREMENTS:** G3, Mac  
OS 9.1 or 10.1 or later, 64MB  
RAM (128MB recommended)

**GOOD NEWS:** More stable than previous version. Better PostScript drawing and preview. Smooth integration with other Studio MX apps.  
**BAD NEWS:** Mac version doesn't support WMF and EMF files. Interface icons and layer system need a face-lift. Extrude tool could be way cooler.

**MacAddict RATED**  
★★★★★  
**GREAT**

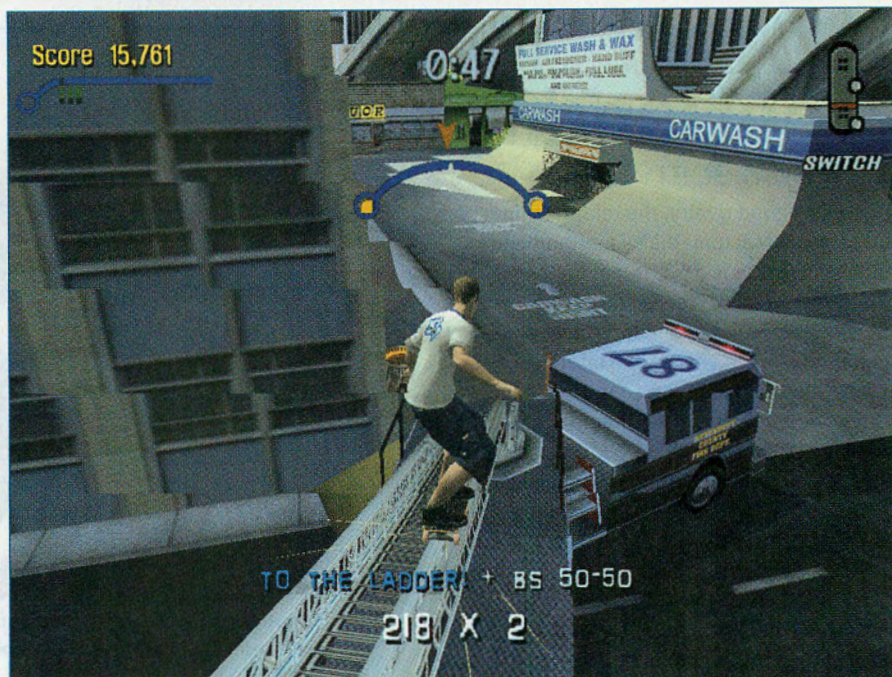


# Tony Hawk's Pro Skater 3

## SKATEBOARDING GAME

Our thumbs are sore, our eyes bloodshot, and we've caught ourselves wondering if we can pull switch-stance nollie-to-nosegrinds on the local freeway median dividers. This can only mean one thing—Tony Hawk's Pro Skater 3 is here, and it's every bit as addicting, exciting, and gravity-defying as the previous version.

For the uninitiated, this is fast-action, arcade-style fun, requiring you to skate around, do tricks, collect points, and perform tasks to unlock each successive level. You score the biggest points by compiling one spinning-flying-sliding trick after another into a long string of grinds, grabs, flips, and manuals (wheelies). Fall on



Don't try this at home, kids—Tony Hawk's Pro Skater 3 is the only way to skate L.A.

by the sheer volume and precision of digit dexterity the game demanded. Pro Skater 3 is certain to be responsible for its share of gamepad-meets-wall encounters.

The biggest change in version 3 is the inclusion of online play. Unfortunately, the networking components of Pro Skater 3 were not yet ready at the time of this writing (and will not be included in the original shipping version—you'll need to get a free patch from Aspyr's Web site). We anticipate that these will add even more depth to an already great game, but won't be earth-shattering. Pro Skater by its nature is a single-player game, and while zipping around with a bunch of other people playing capture the flag on skateboards sounds like a hoot, it won't replace the

trick-centric heart of Pro Skater. Just as in real skateboarding, the game doesn't require other people, just you and a board (or in this case, a gamepad).

While online play is the marquee feature of Tony Hawk's Pro Skater 3, a few other additions are worth mentioning. The game features a new Revert move that lets you string together ramp and street moves. Like the inclusion of the wheelies (Manuals) in Pro Skater 2, this is a small change with big implications for point totals. The money system that plagued Pro Skater 2 has disappeared from version 3 in favor of a new breed of mission goals for each level (such as getting some airline tickets to your buddy at the airport, or trying to impress Canadian skaters who mock you until you

## This game will wreak havoc on your job productivity.

your butt halfway through such a string, and *whoosh*—you've nullified the whole series.

To get the rapid-fire button combos right requires fast fingers and almost certainly a USB gamepad controller (see "Instant Gamepad Support for Control Freaks," below). People put off by twitch-heavy games will not enjoy Pro Skater—though



we enjoy this kind of thumb-numbing action, even we occasionally felt pushed to the edge



No running by the pool—but feel free to grind and railslide all you like.

## Instant Gamepad Support for Control Freaks

Gamepad isn't listed in the Tony Hawk's Pro Skater 3 system requirements, but it should be—it's a console game at heart. However, we noticed that several pads (such as our old Gravis Gamepad Pro USB) don't work with the game. Then we discovered Project Omega's XGamePad Support (free, [www.projectomega.org](http://www.projectomega.org)), an application program interface (API) that game developers can use to add gamepad support to their games. End users can use XGamePad Support to patch gamepad support into Mac OS X games they already own; we stuck the (124K) package into our Library > Application Support folder and suddenly the Gamepad Pro worked flawlessly (as did other assorted pads we tried, though your mileage may vary).

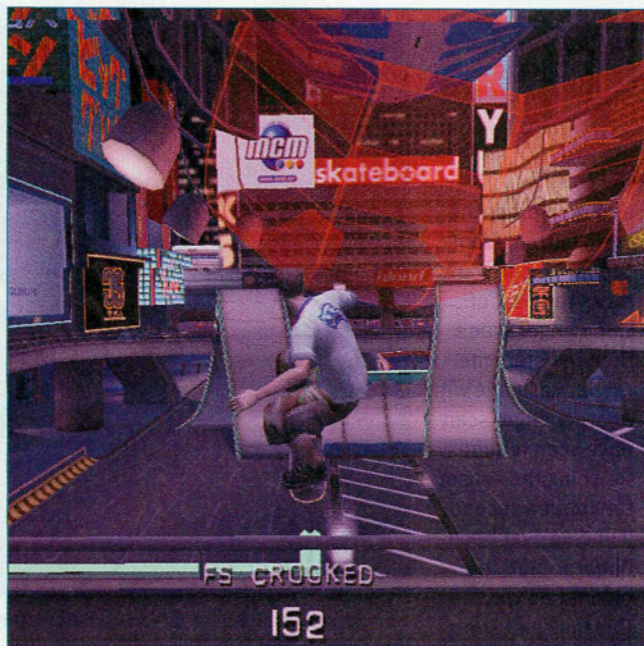


do well—duh, eh?). These goals could have ended up seeming hokey, but they're actually pretty fun and provide a nice respite from the relentless grinding and flipping as you try to tally higher and higher scores. Last but not least, the levels are bigger and better designed than those in any previous release of the game.

Tony Hawk's Pro Skater 3 does a nice job of pushing this revolutionary series a bit further. It's as fun as ever to play, it still has plenty of hidden stuff, and the levels are just plain outstanding. Our only real complaint

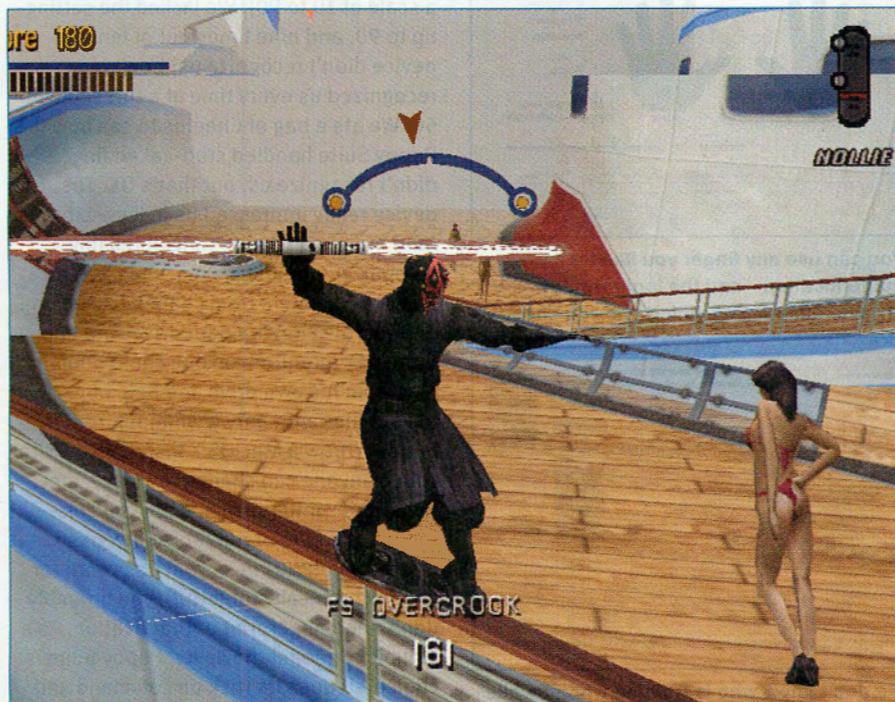
is that it has become quite difficult. The competition rounds in particular can be grueling to get through, ensuring that despite the game's addictive nature, only the most devoted fans will put in the time and effort to get beyond a certain point.

This game will wreak havoc on your social



Grind past the gong in the Tokyo level to discover new territory.

life and job productivity. Try to take a break from Pro Skater and you'll inevitably find yourself magnetically drawn back to your computer for one more attempt at landing that last trick or finishing that next goal. Better start getting your thumbs in shape now.—Robert Capps



Beat the game or enter the right cheat code (check out [www.planettonyhawk.com](http://www.planettonyhawk.com)) to unlock the secret Cruise Ship level (and Darth Maul).

**COMPANY:** Aspyr  
**CONTACT:** 512-708-8100,  
[www.aspyr.com](http://www.aspyr.com)  
**PRICE:** \$39.99

**REQUIREMENTS:** 450MHz G3, Mac OS 9.2.1  
or 10.1 or later, 128MB RAM (256MB for OS  
X), 700MB disc space, ATI Radeon or nVidia  
GeForce card with 32MB video memory

**GOOD NEWS:** Addictive gameplay. Smooth graphics.  
Interesting goals.  
**BAD NEWS:** Occasionally frustrating and repetitive.  
Too difficult for console-game novices.

## From the Hawk's Mouth

We went straight to the source for some pointers on how to really shred the streets in the latest Tony Hawk game, and our new hero—Tony Hawk himself—obliged us with these tips. Thanks, Tony!

"It's about time Pro Skater 3 hit the Mac platform. I won't go into details as to why it takes so long to get a successful PlayStation-PC game made for Mac or the politics involved in such a process. I will only say that the potential of the Mac as a gaming system has not been fully realized, and I am doing my best to help change that. Now, on to making the best of your gaming experience.

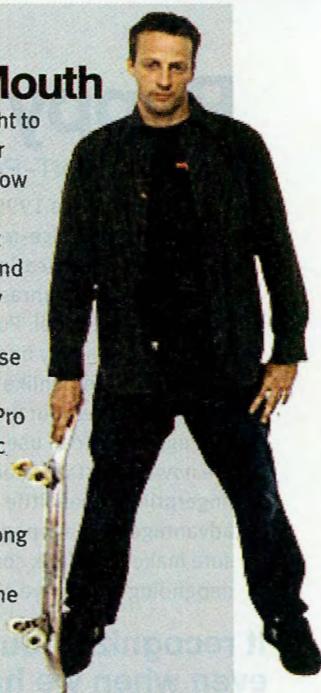
"One key to scoring big in Pro Skater 3 is learning the revert-to-manual function. You can pull big vert tricks and link them to other street gaps and combos seamlessly once you figure out the timing.

"Rio is the easiest level for pulling a big trick combo. Grind one of the benches on the sidewalk near the street, then manual to grind the next obstacle, and so on around the block. Make sure to hit the curved benches and walls on the corners to avoid going into the street. If you can hit some special grinds in the combos, you can easily rack up over a million points in one run.

"My last hint involves Tokyo, but it takes practice. Grind the upper ledges, wall-riding higher and higher until you reach the top ledge and grind past the gong—you will find that the level is much bigger than you thought.

"These are merely my suggestions. For detailed hints, go to [www.planettonyhawk.com](http://www.planettonyhawk.com). Thanks for supporting our game, and thanks to Apple for the incredible platform."

—Tony Hawk



**MacAddict RATED**  
○○○○○  
**GREAT**





# Puppy Suite

## FINGERPRINT-PASSWORD SYSTEM

Years ago (circa 1999) when Apple introduced voice-recognition-based password authentication in Mac OS 9, Steve Jobs's buzz phrase "My voice is my password" was cool. Puppy Suite's motto is even cooler—"My fingerprint is my password"—and unlike voice verification, this system lets your fingerprint do the talking, so you can use it in church. Like the now-extinct voice authentication, fingerprinting has little or no security advantage over a typed password, but it sure makes you look cool (or like a dork, depending on the eye of the beholder).

### It recognized our touch even when we had blackened fingers.

The Puppy Suite hardware is an unobtrusive USB-tethered pad (made by Sony), housing a capacitance sensor (a biometric scanner that recognizes electric current instead of light), which the company says won't fall for printed images of fingerprints and never needs cleaning. We still wish the device had a cover—it seems like a scratch or smudge could spoil the party.

The included software installs a Puppy Account system preferences pane; after restarting your Mac, Puppy Suite replaces your regular login window with an enhanced version offering fingerprint authentication (this option isn't available until you launch the preferences pane and enter the license key). The login window hung us up a bit: After we entered our user name, it wouldn't let us click in the password field—if we hadn't known pressing the Tab key would activate the next field, we would have been stuck.

The Puppy Account system preferences pane lets you enter prints for any user account on your Mac (the prints are stored on the USB device, not the Mac, so no security worries there). You specify authentication via password, fingerprint, or both; choose which finger to use; set the security threshold (more on this later);

and then press the Train button. From there, the software picks the best of three finger scans, then registers the reference image with another finger scan—each scan requires touching the sensor for about a second. If you've ever been fingerprinted the old inkpad way, this falls just short of magic. You may want to practice a bit first (hence Puppy Account's Practice button) to get your finger placement down pat.

Securitywise, we couldn't sneak past Puppy Suite. Our more-nefarious friends say capacitance sensors will always fall for



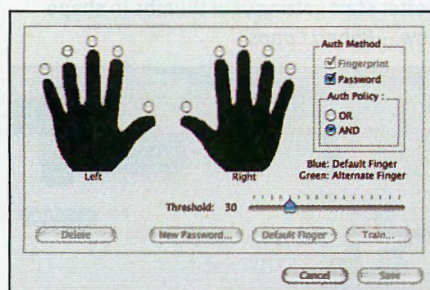
Simple software using advanced algorithms makes this Puppy a good watchdog.

PHOTOGRAPH BY MARK MADEO

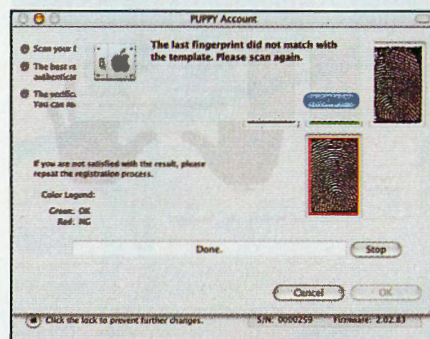
a well-crafted fake fingerprint on gelatin or a gummy bear (although our gummy-bear fake didn't work)—short of a good fake, dismemberment, or coercion, Puppy Suite seems practically impenetrable. A more likely worry is that it'll work *too* well—especially if you turn up the security threshold very high (the default is 30 on a scale of 10 to 90). We jacked the setting up to 90, and nine times out of ten the device didn't recognize us; however, it recognized us every time at a threshold of 50. We ate a bag of Cheetos to see how the Puppy Suite handled crud-caked fingers—it didn't recognize us, but that's OK. The device really impressed us in less-extreme (and more realistic) testing. It reliably recognized our touch even when we had blackened fingers from changing a car tire.

Bootable FireWire hard drives are Puppy Suite's kryptonite—anyone could boot the Mac from his own drive and help himself to your files with nary a whimper from Puppy. Throw a Mac OS X Install disc—with which anyone can change the Mac's root password—into the mix, and it's all his.

Unless you're predictable enough so that people regularly guess your password (or you're chronically forgetful), you probably don't need fingerprint authentication. As a gimmicky gadget, however, Puppy Suite is choice—it does its trick on command and won't embarrass you by misbehaving when you show it off.—Niko Coucouvanis



You can use any finger you like for authentication—and the login window always reminds you which one you chose.



We don't know who is training whom; while teaching Puppy your fingerprint, you learn how to get a consistent scan.



**COMPANY:** Pacific Software Publishing  
**CONTACT:** 425-957-0808,  
www.puppysuite.com  
**PRICE:** \$199

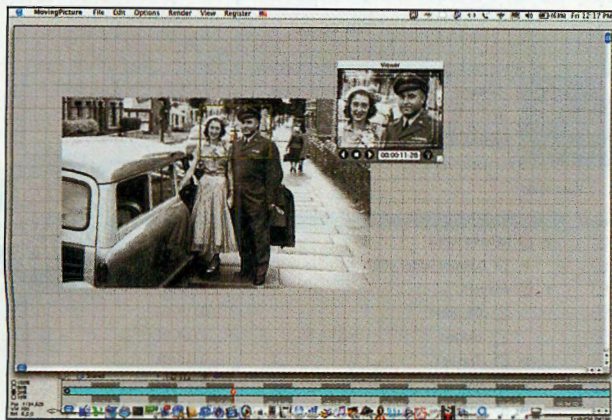
**REQUIREMENTS:** USB-equipped  
Mac, Mac OS 10.2 or later,  
256MB RAM

**GOOD NEWS:** Huge future-cool factor. Accurate fingerprint recognition.

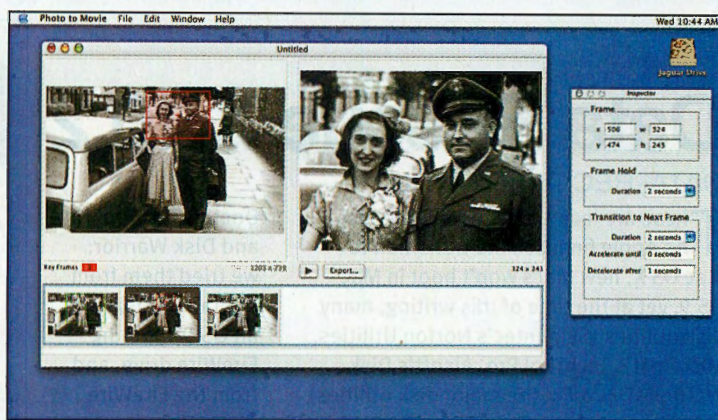
**BAD NEWS:** Three words: FireWire boot disk. Chronically shaky or crusty hands need not apply.

**MacAddict RATED**  
★★★★★  
**GREAT**





**MovingPicture** packs a lot of pan-and-zoom power for putting your stills into motion.



**Photo to Movie** isn't quite as versatile as **MovingPicture**, but it looks (and runs) much smoother.

# MovingPicture 4.0 and Photo to Movie 1.1.3

## PHOTO-EFFECTS SOFTWARE

Ken Burns didn't invent the technique of jazzing up old still photos by zooming in on a detail, panning across, and pulling back to reveal an entire scene, but he sure popularized the practice. When Apple built that capability into iMovie 3, the company christened it the Ken Burns Effect.

Professionals often use Adobe After Effects, which has scads of special-effects power, to re-create that Ken Burns style.

This is where Photo to Movie and MovingPicture come in. Both let budding documentarians put Burnsian moves on digitized stills and pop them into virtually any nonlinear editor tool, from pro apps by Avid and Media 100 to Adobe Premiere and Apple's Final Cut Pro and Express (even iMovie, if you export to DV format).

Though Photo to Movie and MovingPicture create similar results, they're not peers in direct competition.

Photo to Movie is inexpensive shareware.



Elegantly simple and fun to use, it will delight most novice digital moviemakers (it's also

more versatile than iMovie's KB effect). MovingPicture is a professional tool that can be tweaked to suit the most demanding DV editor. Accordingly, it carries a hefty price tag.

Photo to Movie is a breeze—just drag in a picture to get started. A movable, resizable color overlay indicates the camera viewpoint. You can add keyframes for each important waypoint in the movie and keep track of them in a timeline, then export clips in any of several goof-proof formats, from E-Mail Movie to Full Quality NTSC (DV Stream included). It's totally uncomplicated.

MovingPicture, on the other hand, takes some study, and the online documentation is tedious. MovingPicture comes as a plug-in for your favorite editing package, such as Premiere or Final Cut (Pro only—not Final Cut Express), or as a stand-alone version. The latter is free if you first buy a plug-in, but both come licensed for a single computer. (StageTools also provides a free offline version that does everything except render the output.)

Though it can feel clunky and un-Mac-

like (it takes over your Mac's interface), MovingPicture performs. It offers alpha-channel support for transparency, and its actions and timing are tweakable down to the frame level. MovingPicture can render clips with any of the codecs available on a Mac running anything from System 7 to Mac OS X. Windows versions are also available.

## Photo to Movie is totally uncomplicated.

Which tool is best for you? For about the same price as a two-pack of DV cassettes, Photo to Movie does a fantastic job. Moviemakers who have stepped beyond iMovie but don't yet earn a living in video will love it.

MovingPicture, on the other hand, is a pro-level tool with a correspondingly tough learning curve. And it can be finicky—we encountered some glitches that StageTools' prompt tech support quickly resolved. If only this pro tool were as slick to use as Photo to Movie, we'd be all over it.

—Tom Lassiter

## MovingPicture 4.0

**COMPANY:** StageTools  
**CONTACT:** 540-592-7001,  
www.stage-tools.com  
**PRICE:** \$199

**REQUIREMENTS:** Power Mac,  
Mac OS 8 or later

**GOOD NEWS:** Works stand-alone or as a plug-in. Alpha-channel support. Offers precise control with excellent results.  
**BAD NEWS:** Not very Mac-like or intuitive. Slightly clunky.

**MacAddict RATED**  
SOLID

## Photo to Movie 1.1.3

**COMPANY:** LQ Graphics Software  
**CONTACT:** http://lqgraphics.com  
**PRICE:** \$19.95

**REQUIREMENTS:** G3, Mac OS  
10.1 or later

**GOOD NEWS:** Small and svelte. Easy to use. Better results than iMovie.  
**BAD NEWS:** One-trick pony. Results aren't vastly better than iMovie.

**MacAddict RATED**  
GREAT



# Data Rescue X 10.2

## DATA-RECOVERY UTILITY

These are lean times for disk utilities. As Apple finalizes the transition to Mac OS X, new Macs won't boot in Mac OS 9, yet at the time of this writing, many disk utilities (Symantec's Norton Utilities, Micromat's TechTool Pro, Alsoft's Disk Warrior—OK, *all* of the major disk utilities) still don't run natively in OS X. Wrap your head around that, and rue the day the hard drive in your new Mirrored Drive Door Power Mac running OS 10.2.3 starts clicking in a disturbing way and won't boot up. That's exactly what happened to us: As fate would have it, on the same day we received Prosoft's new Data Rescue recovery utility.

First off, this is not a repair utility—it'll help you recover files from a scrambled disk, but it won't fix the disk. Plus, you need an extra hard drive (besides the

Doctor, TechTool Pro, and Disk Warrior; we tried them from bootable CDs, from an OS 9–booting FireWire drive, and from the FireWire disk's Classic environment—all to no avail. Then we booted up from the Data Rescue CD. The app mounted our recalcitrant disk straight away and laboriously scanned the 120GB disk for salvageable files. Within two hours, Data Rescue presented the entire directory of the hard drive, and offered to extract whatever we wanted to an attached FireWire drive (it also supports recovery to a networked volume). We went for broke, selecting a big load of files and letting Data Rescue do its thing. This first attempt was partially successful—the program froze up after rescuing 200MB of files (we verified their integrity on another Mac).

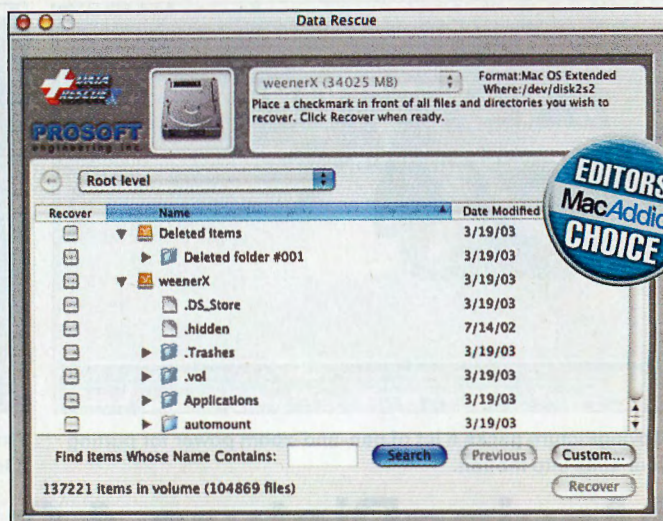
We rebooted from the Data Rescue CD and tried again—this time the program came through, rescuing all our selected files (4GB worth) while we ate lunch. We don't know why the program bailed on the first attempt (unrelated FireWire flakiness, perhaps?), and we obviously can't promise the same stellar performance on every errant disk. Also note that Data Rescue

can't help you if your RAID (redundant array of independent disks) goes down, though Prosoft says RAID support will come in a future release.

One other warning: In the time that we had Data Rescue for review, Apple released the OS 10.2.4 updater—we applied it, and thereafter couldn't boot from the Data Rescue CD until we downloaded the free Data Rescue 10.2 updater from Prosoft's Web site and burned a new boot CD.

For the record, the disk we recovered with Data Rescue had only seen about three months of daily use; a bad B-tree leaf turned out to be the only problem (we suspect a corrupt mailbox shook up the B-tree)—a relatively minor issue. But the fact remains that Data Rescue grabbed our files from a hard drive that other utilities told us was toast. That's great.

—Niko Coucouvanis

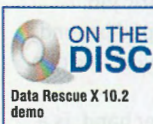


If your data is worth \$89, get Data Rescue (or just back up your data in the first place).

## It grabbed our files from a drive other utilities told us was toast.

trashed one), where you'll stash the files you recover. And we'll just say this once: If you have a good backup regimen, you'll never need Data Rescue (and no, we don't often follow that advice ourselves).

Data Rescue recovered files from a disk that crashed so hard other disk utilities couldn't even see it. We tried Apple's Disk Utility as well as Norton Disk



## Two Ounces of Prevention

Data Rescue can get you out of a data-loss jam, and Prosoft makes two other utilities that can help you avoid such dire straits in the future.

**Data Recycler** (\$49) maintains a secret stash of backups as you work, protecting you from data loss (and major embarrassment) should you accidentally delete a file. Recycler won't help if your main hard drive goes south, because it stores its files there. Data Recycler's hidden talent, EWS (early warning system), scans your drive continually or at scheduled intervals for signs of data corruption.

**Data Backup** (\$49) is a push-button backup and restore utility for manually or automatically backing up your data to another volume or CD.

Block Content	
Block #1000002 (\$F4242) - Total blocks: 0 (\$4A84F5A)	
0000: 8FC0 6000 F205 F32B ADE8 6377 0080 C000	0010: 9547 5505 B32E B756 BA14 8886 D309 60AC
0020: 1F4B B32C B853 B97E 5F63 5179 7662 E0D4	0030: C80B B8B3 B85C 3EAE C82F C6DE B72E FF68
0040: B2C2 E8A8 D7A9 986B AE93 0000 029A FD07	0050: E830 B9EE 6000 FF3F A376 8800 792D B000
0060: 9547 560B 3D15 8EBC 03A5 AEF7 F279 AFA3	0070: EC7A 196F 90FD 11FC CF5F F1B7 F177 13B3
0080: 106E FFF3 E7F1 B8F8 F5DF 8A80 F63F 306D	0090: EEDF 567A B2FC 4DF2 B7F1 916E 0194 FACC
00A0: F0E1 B672 3BF1 FF25 F88B C364 A8C2 E6C0	00B0: 9547 5707 C06F E35F 7B77 D9F3 48FB 0A72
00C0: 7C16 B0AB F7CA 49E2 9FCA 1A5A 732B FB30	00D0: D22D FFE3 CFE3 9FE2 F89E 9DB0 D6C4 D0A3
00E0: D0FE 388F 3EC4 202E 9687 C0FF FF9C 9E8A	00F0: 30FC 9566 7244 FC29 252C B000 870B 3000
0100: 9547 580F C06F 9DFC C5DB F8EB 6EFC 4C7F	0110: 188D C0BF 9DFC C1EC F939 3F13 1FC5 4184
0120: C8BE 90ED B1CF 87F5 DB8D BEC4 4E3E C88E	

Data Rescue even shows you the contents of specific allocation blocks—that's deep.

**COMPANY:** Prosoft Engineering  
**CONTACT:** 925-426-6100,  
www.prosofteng.com  
**PRICE:** \$89

**REQUIREMENTS:** G3, Mac OS  
10.1.5, 128MB RAM, second hard drive  
or network volume for recovered files

**GOOD NEWS:** Mac OS X native. Mounts disks other  
utilities can't see. Saved our bacon.  
**BAD NEWS:** Your mileage may vary. No repair capabilities.

**MacAddict RATED**  
GREAT






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Violence



# Expression 3

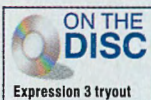
## GRAPHICS SOFTWARE

At version 3, Expression is still more esoteric than full featured compared to its competitors in the realm of vector-based drawing applications. Foremost among Expression's unique features is Skeletal Strokes, which allows you to define a vector object as a brush stroke and use it in a number of ways. The most obvious use would be to make borders or strictly ornamental design elements, but the software ships with a number of examples, which go beyond that and provide inspiration. A number of other applications, including Macromedia FreeHand (see our review on p44) and Adobe Illustrator (Reviews, Mar/02, p44), include a similar function but without the versatility and level of customization present here. Expression also lets you create strokes

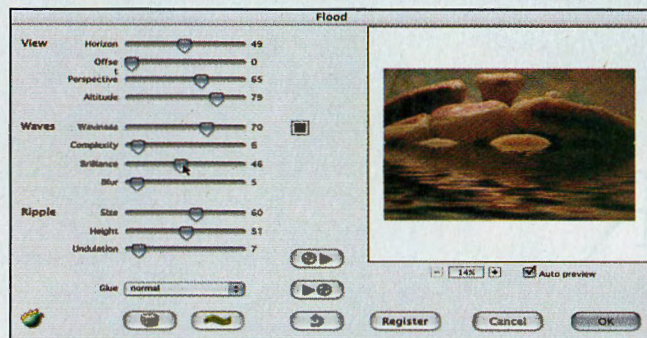
### Expression 3 is still more esoteric than full featured.

based on bitmap graphics, which tend to look more natural (in charcoal- and pastel-style drawings), but don't scale as well as vector art does.

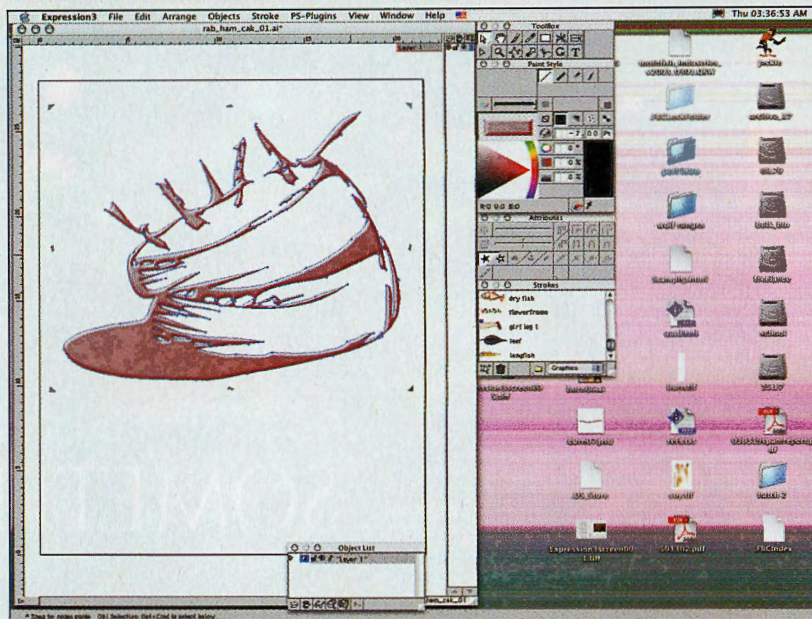
The main strength of this application is the imaginative ways it allows you to combine the merits of vector and bitmap art. In other apps, it's an either-or proposition, but Expression merges



vector's smooth, scalable (yet uneditable once rendered) lines with bitmap's less-scalable



You can use Photoshop plug-ins in Expression, but some (like Flaming Pear's Flood, shown here) tend to crash the program.



Chrome cakes are where it's at these days—just ask Martha Stewart.

(but always editable) realism. For example, if you want realistic brush strokes, you can create your own, based on an imported scan of a dab of paint.

In addition to the main attraction (Skeletal Strokes), Expression 3 includes a surprising number of little gems for such an affordable program. The Flash (SWF) export makes it easy to create animated widgets for the Web—but nothing too complex; similarly, the trace bitmap function is handy when you're looking to convert a JPG into line art, but it includes fewer options than either stand-alone applications like Adobe Streamline or Flash's built-in trace function. You can use your own reflection maps for chrome-style bevels and specify the lighting direction (but not the bevel shape, à la Eye Candy), and if you tell Expression where your Photoshop plug-ins

are located, it will use them on raster images (although we had pretty mixed results using Photoshop plug-ins with Expression).

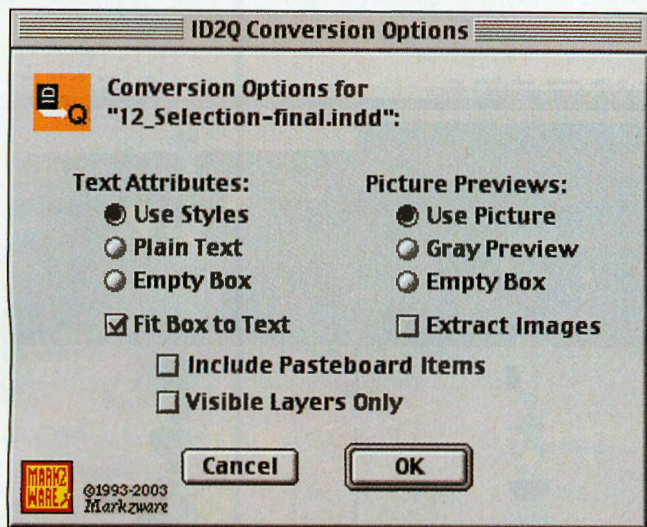
While you can create some striking effects in Expression, it's important to keep the final output in mind. As always, low-resolution Web-based illustrations are

fairly easy to keep small but still editable, while projects intended for high-res print jobs require advance planning with that destination in mind. Expression's unusual mix of vector and bitmap drawing dictates that at some point (either upon export, Web publication, or RIP), your files must conform to one or the other standard, be it vector or bitmap. Some of the cooler effects simply vanished when we tried to convert them to other formats, and others ended up unacceptably funkified. The interface takes some getting used to, but the company's developers are fond of reiterating that they're programmers, not necessarily user interface designers.

Expression can import and export the most common types of file formats, but if you're planning to import Illustrator files, make sure they're version 8 or earlier. The export dialog helpfully offers to vectorize bitmapped strokes, but not paper effects or bevels, limiting Expression's use in conjunction with more narrow-minded vector-drawing programs. The lack of an SVG option disappointed us, since it's an open standard. If your vector-drawing needs are modest, you may be able to get by with Expression and no other programs. For more-advanced vector artists, or anyone with the occasional inclination to sketch, the novelty of vector-sketching alone may sell you on Expression 3.

—Paul Yoon





Quark users don't have to miss out on the InDesign revolution completely, thanks to ID2Q.

# ID2Q

## QUARKXPRESS XTENSION

As a quasi-acronym for *InDesign to QuarkXPress*, ID2Q is the latest XTension for QuarkXPress from Markzware, developer of PM2Q and PM2Q5 (for opening PageMaker documents in QuarkXPress) and FlightCheck (a popular preflighting utility). As the name implies, ID2Q lets QuarkXPress users open InDesign 1.5 to 2.x documents.

After you install ID2Q, opening an Adobe InDesign document is a simple matter of selecting the Convert InDesign Files item from the Utility menu. When you open an InDesign document, a dialog appears with several options for controlling the document's conversion. For text you have the option to import InDesign style sheets, convert styled text to plain text, or remove all text (in case you want to turn the document into a template). The options for pictures are similar: You can convert pictures with or without previews, or you can strip out the pictures and convert only the picture boxes. Also, you have the option of including hidden layers and objects on the pasteboard.

that QuarkXPress lacks. When you open an InDesign document you lose, among other things, transparency (as in drop shadows, feathered edges, blending modes, and opacity), multicolored gradients (only the start and end colors are converted), tables, layers, master pages based on other master pages, kerning, and any text that's

## The list of ID2Q's limitations reads like the list of InDesign features that Quark lacks.

been converted to outlines. And although ID2Q opened most of our simple test files without problems, some complex InDesign documents made QuarkXPress crash without warning.

ID2Q is easy to install and use, and it performs its one-trick-pony thing reasonably well, but that begs the question of how many QuarkXPress users really need a utility to open InDesign documents—especially considering ID2Q's limitations and its hefty price tag. Whether you consider Quark a sinking ship or just a slow boat to Mac OS X, the fact remains that happy InDesign converts (like us) don't need ID2Q.

—John Cruise



So far, so good—but the list of ID2Q's known limitations reads like the list of InDesign features

**COMPANY:** Markzware

**CONTACT:** 949-756-5100 or 800-300-3532,

www.markzware.com

**PRICE:** \$199

**REQUIREMENTS:** Power Mac 7200, Mac OS 8.6 to 9.x, 16MB RAM, 10MB disk space, QuarkXPress 4.1 or later

**GOOD NEWS:** Might provide the tether of moral support you need to make the leap to InDesign.

**BAD NEWS:** Expensive. Missing most of InDesign's unique features.

MacAddict RATED  
○○○○○○  
50-50

9



## Who's looking at the files on your old computer?

### — NEWS FLASH —

Associated Press  
January 2003

"... simply deleting a file, or even following that up by emptying the 'trash' folder, does not necessarily make the information irretrievable."

Don't risk putting your computer files into the wrong hands.

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www.SuperScrubber.com



# Amorphium 3.1

## 3D GRAPHICS AND ANIMATION

Electric Image's Amorphium is one of those applications with amazing potential that never gets due respect: Pros complain about its inefficient rendering, while newbies shy away from the Mac-alien interface. But the truth is that Amorphium is a fun and easy-to-use 3D-modeling tool. It's also capable of animating and rendering animations to QuickTime and Flash SWF files, making it very attractive to Web designers looking to spice up their designs with some true 3D animation.

If you've got more interest than experience in 3D graphics and animation, Amorphium is a great place to start. For better or worse, it uses a unique interface, which actually makes it less intimidating than most 3D applications and fosters experimentation and learning. Most procedures happen in real time, providing

## It's a fun sculpting tool with the power of a serious modeling program.

instant feedback. This makes object modeling in Amorphium more like sculpting with virtual clay than like pixel-pushing computer geekery (and there's no clay mess to clean up).

Besides running in Mac OS X, Amorphium's main new feature is Subdivision Surface modeling. Sub-D modeling lets you sculpt a model and add as much detail as you want using a virtual cage that surrounds the object and has as much or as little influence on the underlying object as you specify. Amorphium designates Sub-D objects as Tin objects, which you can tweak and twist and adjust all you like.

If you're new to 3D, you may not realize what a huge addition Sub-D is; it gives Amorphium—an already fun sculpting tool—the power of a serious modeling program.

The last version of Amorphium could use image files for decals, textures, and backgrounds, but now it lets you use QuickTime

3D modeling is never easy, but Amorphium at least makes the process less difficult.

movies too. This makes it possible to create sophisticated effects such as rippling water or rolling clouds, for example, with a movie of such moving textures. Imagine building an image of the ideal next-generation iMac (and who hasn't?) and placing video footage from your favorite monster movie on its 32-inch LCD display.

The digital documentation comes in PDF files, which you can access from within the program. These are properly authored, with color pictures, a linked table of contents, and chapter and page bookmarks. Regardless, if you still prefer printed manuals, you're out of luck.

Beyond its take-over-the-whole-Mac interface, Amorphium also shows a near-complete disregard for Apple's interface conventions. While Command-O opens a project, Command-W won't close it—try Command-C for that (no huge loss, as you can't copy or paste objects in Amorphium anyway).

Amorphium is also unconventional in the performance department. Optimistically, the application runs fast enough on older Macs (specifically, a 500MHz PowerBook G3) for instant-gratification fun; pessimistically, it's not multithreaded or multiprocessor aware, so big projects take some time—a Dual Power Mac G4 won't help this app as much as it helps some. The worst productivity offender is Amorphium's



Ta-da! This groovy lava lamp began life as the model shown above.

inability to render in the background. Once you start a render, you can either watch the progress bar or toggle to another app—which stops the render until you switch back to Amorphium. This effectively hamstring Amorphium so that it will never become a production application, since no one has time to tie up their computer for rendering unless they're going to lunch or home for the night.

Despite Amorphium's limitations, sculpting in real time is a blast, and the program's ability to export models in a variety of formats makes it a valuable tool when used with other 3D applications. While it's not a tool to build a career on, newbies will have fun playing with this virtual sculpting tool while learning how 3D graphics work. Professional users might consider it a good add-on for their modeling toolbox.—Mike Caputo



**COMPANY:** Electric Image  
**CONTACT:** 949-481-6660,  
www.amorphium.com

**PRICE:** \$149 (boxed), \$139 (download),  
\$89 (upgrade)  
**REQUIREMENTS:** G3, Mac OS 9 or  
later, 128MB RAM

**GOOD NEWS:** Subdivision modeling. Relatively quick-and-easy 3D.  
Comprehensive PDF manual.  
**BAD NEWS:** Unconventional interface. No background rendering.

MacAddict RATED  
SOLID



# Black & White: Creature Isle

## EXPANSION PACK

**B**rush up on your miracles, god dude. It's time once again to don saintly robes and take control of your portion of the playing universe.

Black & White: Creature Isle, an add-on for one of the more entertaining god games ever to soak up our leisure hours, is now ready for the Mac. Much as we loved playing god—controlling an interactive environment, recruiting dedicated worshippers, working miracles, and generally lording it over an entire virtual population—Creature Isle delves deep into one of the best elements of the game: the care and rearing of your creature (an animal minion who does much of the god's busywork in Black & White).

## Creature Isle offers a refreshing twist on Black & White.

If you played the original Black & White, you know what it's like to be an inexperienced godlet, faced with a bewildering mix of challenges: combat, long-range strategy, puzzles, resource management, creature rearing, and a need to control villages by getting the inhabitants to worship you over competing gods.



This game is educational—bet you didn't know that's a ballista the zebra is about to fire.

Think of Creature Isle as summer camp for your Black & White creature—an unusually fun summer camp.

So what could Creature Isle possibly change in this busy world? A lot. This time you're on a new island, with no competing gods. You find yourself (and your pet creature) surrounded by a host of various wild-animal folk who have formed a communal organization called the Brotherhood. Your creature is invited to join their ranks, but must first undergo a series of difficult trials designed to weed out unworthy critters.

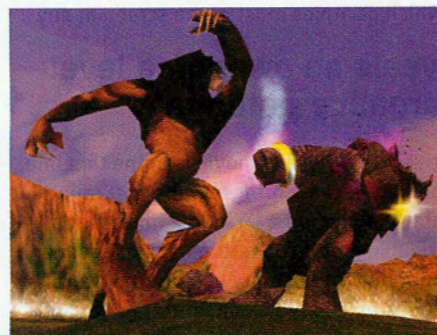
Creature Isle offers a refreshing twist on Black & White in that it spares you the mundane godly duties of impressing and caring for your devotees and the tedious micromanagement of villages. Your primary concern is the same thing that made the first game so much fun—rearing and training your creature—only this time the creature develops and trains its own pet critter (a giant chicken named Tyke).

So you spend your time guiding your creature through 18 arcade-style tasks to gain acceptance into the Brotherhood. You shoot marbles, go bowling, play soccer, fire a gigantic crossbow, run foot races, play hide-and-seek, and even take potshots at dolphins. Some of the tests are easy; a fair number are not just difficult but downright frustrating until you discover their secrets. Each test has a gimmick that makes passing much easier. For example, you must race a turtle (not unlike the tortoise and the hare), and until you figure



out that cheating is allowed and you can take shortcuts, you'll have trouble winning the race.

The creatures that inhabit the beautifully colorful island include marble-playing apes, bowling cows, soccer-playing baboons, and even a break-dancing leopard with a British accent. The visuals



**Creature Isle isn't all fun and games—your creature has to go through the Rhino before it can join the Brotherhood.**

are rich and vivid, the sound effects are excellent, and the creatures' AI will push you to your limits.

Black & White fans will enjoy this expansion. Without management of all those villages, Creature Isle doesn't feel the same, but for newcomers and impatient gamers that's a plus. Now you can focus entirely on training your creature. Just try not to get all sentimental when you're watching it raise its own little critter.—John Lee

**COMPANY:** Feral Interactive  
**CONTACT:** [www.feral.co.uk](http://www.feral.co.uk)  
**PRICE:** \$40

**REQUIREMENTS:** Power Mac,  
Mac OS 8.6 or 10.1.3 or later,  
128MB RAM, OpenGL graphics  
with 8MB VRAM

**GOOD NEWS:** Beautiful visuals. Imaginative critters. Lots of arcade-style games. Lacks original game's tedious micromanagement.  
**BAD NEWS:** Complex and difficult-to-handle-at-first interface.

**MacAddict RATED**  
●●●●●  
**GREAT**

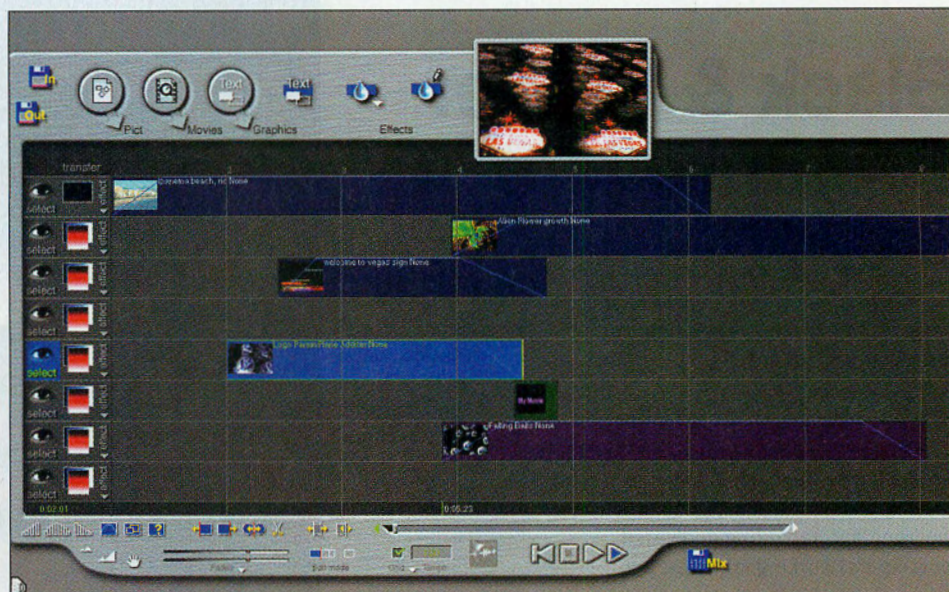


# VTrack 1.5

## VIDEO EDITOR

While the Mac video-editing world is certainly a crowded place—what with Adobe Premiere and Apple's iMovie and Final Cut offering everything from basic editing to advanced compositing and motion graphics—yet another contender has entered the ring. Editing video in VTrack is exceedingly easy, and though it lacks much of the depth of Final Cut and Premiere, its close integration with its sibling program, ArtMatic Pro, gives the app a staggering level of special-effects capabilities.

The basic VTrack interface is clean and simple, and in keeping with the visual style established by U&I Software's other products. The program supports up to eight video tracks and a single overall audio track, but you can use any of the eight video tracks to work around the single overall audio-track limitation. You place movies and artwork (bitmapped images only) in the timeline, which occupies most of the screen at any



VTrack's interface looks similar enough to those of other video editors, but when used with its dynamic-duo sibling, ArtMatic Pro, there's nothing like it.

## Reveals an awesome level of creative potential.

given time. Once a movie is in the timeline, double-clicking brings up the first round of tweaking tools, including time-precise trimming tools for determining exact in and out points, the ability to slow down and speed up clip playback, and Transfer and Filter modes. The Transfer modes are like the layer modes in Photoshop, and include the requisite Multiply (for darkening) and Overlay, as well as the less-useful Difference mode. As with After Effects' Track Matte mode, you can designate a movie to mask all movies below it in the timeline—incredibly useful for building complex composites.

VTrack also has filters for blurring, false colorization, embossing, adding motion blur, and many other effects. While you can specify the equivalent of two keyframes for

animating the amount of the effect over time (having a title gradually snap into focus using an animated Gaussian blur filter, for example), applying more than one effect per clip requires that you sacrifice one of the eight video tracks for each additional effect. Fear not, though—VTrack's real power emerges when you use it in conjunction with ArtMatic Pro, U&I Software's bewilderingly powerful video-synthesis program.

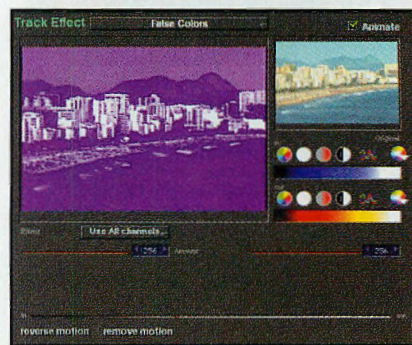
By using ArtMatic Pro and VTrack together, you effectively turn ArtMatic into the most powerful visual-effects plug-in factory ever. As a stand-alone program, ArtMatic can inherently use still images and movies as sources in its effects trees, or flowcharts. When you import a nonrendered ArtMatic file into VTrack and place it in the timeline, you can have the cumulative edited video of the tracks above it piped into one of the four movie inputs in the ArtMatic file. Say you start with an ArtMatic file that maps video onto a couple of rectangular planes floating through a series of textured "rooms". Place the ArtMatic file in the timeline underneath a section with two or three video segments edited together, and then set the input source of the ArtMatic file to VTrack, and the program automatically renders the cumulative edited video from the top two or three tracks into the 3D floating planes.

This innovative pipeline approach appears simple on the surface, but reveals an awesome level of creative potential.

Rounding out these seemingly overwhelming possibilities are tools for easily creating animated titles and nonlinear cross-dissolves, as well as snapping video and still segments placed on the timeline to a predetermined beat grid—wonderful for quickly whipping up music videos that follow the beat.

VTrack is a nifty, easy-to-use video editor but it's not worth buying on its own—plan on getting it with ArtMatic Pro, and the potent visual madness that shortly thereafter emits from your Mac's screen will blow you away.

—David Biedny



It's easy to create custom tinting effects—here we interpolate two different tint gradients.



**COMPANY:** U&I Software  
**CONTACT:** 650-364-0556,  
www.uisoftware.com  
**PRICE:** \$299 (\$499 bundled with ArtMatic Pro)

**REQUIREMENTS:** Power Mac  
(400MHz G3 recommended),  
128MB RAM, Mac OS 9 or later

**GOOD NEWS:** Uncluttered interface. Incredible integration with ArtMatic Pro. Potentially stunning output.  
**BAD NEWS:** Only one filter effect per clip without ArtMatic Pro. Needs better audio support. Relatively expensive.

**MacAddict RATED**  
**GREAT**



# Data Bank

## FIREWIRE 400 PORTABLE HARD DRIVE

LaCie's minuscule Data Bank drive weighs in at just under 5 ounces and houses the same 1.8-inch, 4,200-rpm 20GB Toshiba hard drive that's in Apple's top-of-the-line iPod. This gorgeous microdrive has both a FireWire 400 and a mini-USB 2.0 port—cables included—as

of our only complaints about the Data Bank. We've had our hands on five different units, and the door broke off of one, flopped flimsily on another, felt solid on yet another, and was somewhere in between on the other two.

Also, if file-transfer performance is important to you, the Data Bank will disappoint: On the FireWire 400 bus of a 1GHz Power Mac G4, it's only about one-third as fast as that Mac's 7,200-rpm 80GB IBM ATA/100 internal drive. On the same Mac's poky USB 1.1 bus, the Data Bank's performance is ludicrous: The Power Mac's drive is over 40 times as fast.

But it's not meant to be fast. It's meant to be cool—and the Data Bank is arguably



**Yes, it is possible for a hard drive to be sexy.**

the coolest hard drive ever made. How cool? Well, the next time you want to impress someone, just pull your Data Bank out of its supplied velvet pouch and casually comment that its case (magnesium on top, steel beneath) was not only designed by F. A. Porsche—yes, *that* Porsche—but that the number 1.618033988749894848 stamped upon it is the ratio of two successive Fibonacci numbers, known since ancient times as the universal measure of beauty that the Greeks called the Golden Mean. Now *that's* Deep Geek.—Rik Myslewski

**This is arguably the coolest hard drive ever made.**

well as a socket into which you can plug an optional \$20 power supply if you don't have a powered USB hub. Next to the FireWire port is a tiny blue LED that lights when the drive is powered up and blinks when it's busy.

The access door for these ports is one

**COMPANY:** LaCie  
**CONTACT:** 503-844-4502, [www.lacie.com](http://www.lacie.com)  
**PRICE:** \$299

**REQUIREMENTS:** FireWire- or USB-equipped Mac (FireWire highly recommended), Mac OS 8.6 or later

**GOOD NEWS:** Tiny. Exceptionally cool design. USB and FireWire bus powered.  
**BAD NEWS:** Slow. Eensy-weensy 512KB buffer. Problematic port-access door.

**MacAddict RATED**  
**GREAT**

# PocketMouse Pro Wireless

## OPTICAL MOUSE

We've never met a Kensington mouse we didn't like—until now. Despite its proud lineage and inclusion of the mighty MouseWorks software, in our experience the PocketMouse Pro Wireless was ratlike.

The PocketMouse's wireless range and battery life are decent, but this mouse just doesn't work on most surfaces, including the fairly dull tabletop in our offices, which hasn't hindered the tracking of any other optical mouse we've tested. Even on a dark-fabric mousepad—the ideal surface for optical mousing—the cursor often hesitated when we moved the mouse.

This mouse would be great for travel—the transmitter tucks away behind a trap door so there aren't any cords or extra pieces to carry—if only it worked better.—Niko Coucouvanis



**Mouse? Or mouse dropping?**

**COMPANY:** Kensington  
**CONTACT:** 800-235-6708, [www.kensington.com](http://www.kensington.com)

**PRICE:** \$49.99  
**REQUIREMENTS:** USB-equipped Mac, Mac OS 8 to 9.x or 10.1.5 or later

**GOOD NEWS:** Cool hideaway transmitter.  
**BAD NEWS:** Lame tracking on most surfaces.

**MacAddict RATED**  
**LOUSY**

# Power Over Ethernet

## AIRPORT EXTENSION CORD

The premise behind Power Over Ethernet is simple: If you splice electrical juice into the Ethernet cable, you can mount an AirPort Base Station farther away—up to 250 feet farther—from an electrical outlet.

The kit includes two adapters: One plugs into the Base Station's power and data ports, and the other attaches to the Base Station's power supply and your Ethernet hub or broadband modem. For a dual-Ethernet Base Station (Snow), you connect the two adapters with a standard Cat-5 Ethernet cable up to 250 feet in length. The original, single-Ethernet Station (Graphite) is limited to a 150-foot extension. Just plug it in, and it works—we like that.

This one-trick widget obviously isn't for everyone, but as one-trick widgets go, it's a class act.—Niko Coucouvanis



**Power Over Ethernet makes perfect sense.**

**COMPANY:** MacWireless  
**CONTACT:** 510-848-7126, [www.macwireless.com](http://www.macwireless.com)

**PRICE:** \$29.98  
**REQUIREMENTS:** First-generation (Snow or Graphite) AirPort Base Station

**GOOD NEWS:** Nearly doubles AirPort's effective range.  
**BAD NEWS:** No AirPort Extreme version yet.

**MacAddict RATED**  
**GREAT**



# theHotList

THE BEST OF THE BEST FROM RECENT REVIEWS

**SHOPPING?**  
HERE'S WHAT WE  
RECOMMEND

## NEW THIS MONTH:



## NASCAR Racing 2002 Season

Even if you don't know Kyle Petty from Tom Petty, you'll have a blast playing this stunning stock-car racing game. Great sound, great graphics—even the damage your rookie driving causes is realistic.

## FontLab 4.5.1

OK, so it's not an earthshaking event for every Mac addict—but for type designers, the arrival of Font Lab 4.5.1 for Mac OS X is momentous. As reviewer Paul Yoon wrote, "It sucks not a bit." High praise indeed.



## Nikon Coolpix 3100

MacAddict editor and pro photographer Kris Fong is picky. Very picky. So when she calls the Nikon Coolpix 3100 "the best point-and-shoot digicam" she's ever seen, we believe her. So should you.

### SOFTWARE

#### AUDIO

MOTU Digital Performer 3	\$795.00	Feb/02, p58	This pro-audio app has a great array of features.
PropellerHead Software Reason 2	\$399.00	Mar/03, p50	It's the best software-synth bargain available today.
Roxio Toast with Jam 5	\$189.95	Sep/02, p49	Burn CDs, MP3 CDs, DVDs, and VCDs and edit audio.

#### GAMES

Ambrosia Software Escape Velocity: Nova	\$30.00	Sep/02, p48	Enjoy the perverse thrill of galactic domination.
Aspyr Jedi Knight II: Jedi Outcast	\$49.95	Feb/03, p37	Fantastic gameplay with both weapons and The Force.
Aspyr Medal of Honor: Allied Assault	\$50.00	Oct/02, p43	The WWII first-person shooter is a surefire classic.
Aspyr NASCAR Racing 2002 Season	\$39.99	May/03, p57	Realistic NASCAR racing on a Mac? Believe it.
Aspyr Return to Castle Wolfenstein	\$49.95	Aug/02, p42	What's more satisfying than killing zombie Nazis?
Aspyr The Sims Unleashed	\$29.95	May/03, p58	Pixel-pets abound in the best Sims expansion pack yet.
MacPlay No One Lives Forever	\$49.99	Mar/03, p49	A beautiful spy, sly foes, nifty gadgets, fast action—nice.
MacSoft Max Payne	\$40.00	Dec/02, p42	Max seeks revenge—and gets plenty of it in this FPS.

#### GRAPHICS & LAYOUT

Adobe InDesign 2.0	\$699.00	May/02, p50	Look out, Quark—Adobe's rival layout tool kicks butt.
Adobe Photoshop 7	\$609.00	Jul/02, p46	Picture-perfect pixel pusher moves to Mac OS X.
Adobe Photoshop Elements 2	\$99.00	Dec/02, p40	It has most of Photoshop's power for \$500 less.
FontLab 4.5.2	\$549.00	May/03, p53	The font editor all type geeks have been waiting for.
Macromedia Dreamweaver MX	\$399.00	Sep/02, p44	Our favorite Web-design tool gets a strong upgrade.
Macromedia Flash MX	\$499.00	Jul/02, p51	It started in animation; now it can do anything.

#### PRODUCTIVITY & UTILITIES

Apple Keynote	\$99.00	Apr/03, p48	This presentation app was built for Mac OS X—and it shows.
Bare Bones Software BBEdit 7.0.1	\$179.00	Mar/03, p52	By far the most powerful text editor money can buy.
Microsoft Office v. X	\$499.00	Feb/02, p42	The 800-pound gorilla of productivity applications.
Script Software CopyPaste-X 1.5.1	\$20.00	Apr/03, p61	Shareware must be great to make the list. This clipboard is.

#### VIDEO & ANIMATION

Adobe After Effects 5.5	\$649.00	May/02, p49	This motion-graphics stud improves its 3D powers.
Apple DVD Studio Pro 1.5	\$999.00	Oct/02, p55	Apple's essential DVD-burning app gets even better.
Apple Final Cut Pro 3	\$999.00	Apr/02, p45	This pro-level video editor is a real-time revelation.

### HARDWARE

#### ACCESSORIES

Dr. Bott's extendAIR Direct	\$149.95	May/03, p51	Make AirPort Extreme's range noticeably more extreme.
XtremeMac UFO	\$129.95	May/03, p59	If you own a G4 iMac, you gotta get this way-cool hub.

#### AUDIO

Apple 20GB iPod	\$499.00	Nov/02, p45	More storage, cool accessories—it's all good.
Digidesign Mbox	\$495.00	May/02, p59	This audio interface is a traveling musician's delight.

#### DIGITAL CAMERAS

Canon PowerShot S230 Digital Elph	\$399.00	Mar/03, p48	A great 3.2-megapixel camera in a tiny, low-cost package.
Nikon Coolpix 3100	\$340.00	May/03, p43	The best point-and-shoot digicam we've seen yet.
Olympus C-4000 Zoom	\$499.00	Jan/03, p52	Great image quality, 4 megapixels, and versatile controls.

#### DISPLAYS

Apple Cinema HD Display	\$1,999.00	Aug/02, p40	This 23-inch, 1,920-by-1,200-pixel beauty inspires lust.
Formac gallery 2010 Platinum	\$1,399.00	Jan/03, p47	Bright, fast, huge—and it costs only \$.0007 per pixel.

#### PRINTERS

Brother HL-1870N	\$699.00	Aug/02, p45	Need a sturdy laser printer? This one's a workhorse.
Epson Stylus Photo 2200	\$699.00	Oct/02, p42	The most stunning photo printer we've ever tested.

#### SCANNERS

Canon CanoScan LIDE 30	\$99.00	Nov/02, p52	This entry-level scanner gets the job done inexpensively.
Epson Perfection Photo	\$399.00	Oct/02, p48	This sophisticated scanner also handles transparencies.

#### STORAGE

Maxtor Personal Storage 5000XT	\$399.99	Feb/03, p44	Solid construction, push-button backup, and 250GB.
OWC Mercury Elite 160GB	\$349.95	Sep/02, p53	This handsome, sturdy drive is whisper quiet.
TDK veloCD	\$315.99	Jul/02, p54	FireWire-equipped CD-RW drive is freaky fast.

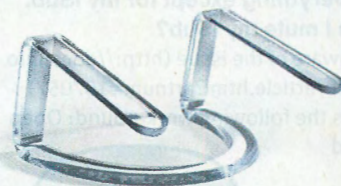


# Raise your expectations

## Elevate your notebook to create the perfect desktop

The iCurve - Invisible Laptop Stand is the key to replacing your desktop machine with a new notebook. It elevates your screen to a comfortable eye-level height. It raises the notebook off the desk - making room for a full-size keyboard and mouse. And it helps air circulate and keep your new 'hot' laptop cool.

Gain portability without sacrificing desktop comfort. Add an iCurve to your notebook and have the best of both worlds.



**iCurve**  
Invisible Laptop Stand

JUST  
\$39<sup>99</sup>

EDITORS'  
MacAddict  
CHOICE



JUST  
\$45<sup>00</sup>

### PowerMate USB Multimedia Controller

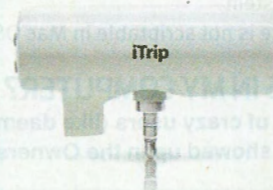
- Great volume & play button for iTunes
- Perfect jog/shuttle wheel to edit iMovies
- Programmable for any application
- Solid aluminum with blue glowing base



NOW  
\$39<sup>99</sup>

### iMic USB Audio Interface

- Adds stereo audio input to your Mac
- Plug-and-Play, no software required
- Portable, no installation or power needed
- Supports MP3, QuickTime and AIFF files



ONLY  
\$35<sup>00</sup>

### iTrip FM Modulator for iPod

- Play your iPod through any FM radio station in your car, truck or boat
- iPod Powered - no battery necessary
- Fits perfectly on top - no dongle or cable

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# 64 HOW TO

because inquiring minds have the right to be inspired

GOT A QUESTION?  
NEED ADVICE?

# ask us

WE CAN HELP

## SUBDUE THE ISUB

Pressing the mute key on my keyboard mutes everything except for my iSub. How can I mute my iSub?

Apple is aware of the issue (<http://docs.info.apple.com/article.html?artnum=107057>) and offers the following workaround: Open the Sound system preference, click the Output tab, then check the Mute box next to the iSub volume slider. An AppleScript would be a nice workaround, but alas, the Sound system preference is not scriptable in Mac OS X.



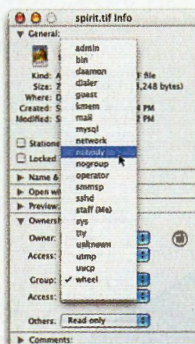
iSublimate your iSub's sound via system preferences.

## WHO IS IN MY COMPUTER?

All sorts of crazy users (like daemon) recently showed up in the Ownership &

## Permissions section of my Desktop Info window. Have I been hacked?

No. These nefarious-sounding users are how Mac OS X's Unix base keeps itself running. For example, WWW is in charge of keeping the Web server going, and dear old daemon governs background processes. It sounds schizophrenic, but we can assure you it's all perfectly safe.



Who are you?  
Who-oo, Who-oo.

## JAGUAR FRIES IMAC

Why did my iMac's screen go all black after I installed Jaguar?

Jaguar has reportedly fried the motherboards on some slot-loading iMacs. To avoid disaster, Mac users should update their iMac's firmware before installing Jaguar. Check out this TidBits article (<http://db.tidbits.com/getbits.acgi?tbart=06973>) for more information on the problem and a possible fix. (Thanks to reader Steve Tolin for this information.)

## GROUPED FONTS IN MAC OS X

How do I group my Mac OS X fonts by family? The latest versions of Font Reserve and Suitcase can't do it.

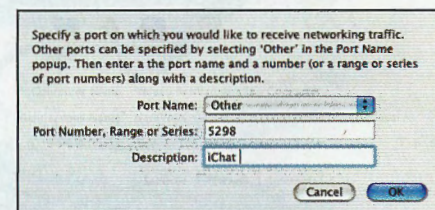
Patience, grasshopper. In theory, Mac OS X's font-management system, Font Panel, gives applications full access to font groupings by family, type, and even custom criteria. The problem is that Font Panel is available only to Mac OS X Cocoa applications. Right now, most Mac OS X

font programs are Carbon applications. As soon as developers rewrite the major apps for Cocoa, the very cool Font Panel will bring font management to a new level.

## CHAT THROUGH FIREWALLS

### How can I use iChat and keep Mac OS X's firewall enabled?

By default, Mac OS X's firewall (System Preferences > Sharing) closes the special IP port that iChat uses. To open it back up, click the New button and select Other from the Port Name pop-up menu. Enter 5298 in the Port Number field and iChat in the Description field. Click the OK button, and iChat's port should appear in the Description (Ports) menu with the On box checked.



iChat from behind your Mac OS X firewall.

## ZERO IT OUT

How do I really, truly erase my hard drive?

To really, truly obliterate your files, you need to zero the data on your disk. This procedure writes zeros to every spot on the hard drive, irreversibly overwriting all your data. You'll need Mac OS 10.2.3's Disk Utility (Applications > Utilities > Disk Utility) to erase the drive. Highlight the hard drive on the left side of the window, select the Erase tab, click the Options button, and select the Zero All Data check box.

# quick answers

to quick questions

## QUICKTIME PRO

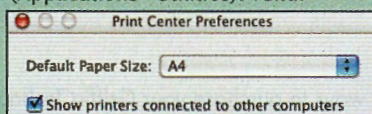
If I purchase QuickTime Pro, can I use the same serial number in Mac OS 9 and Mac OS X?

Yes. The Windows version of QuickTime Pro, however, uses a different number from the Mac OS serial number.

## DEFAULT PAGE SIZE

Excusez-moi, but how do I change the default paper size from zee stupide U.S. letter?

Standard international paper sizes such as A4 and B5 are located in the Mac OS X Print Center application's preferences (Applications > Utilities). Voilà.



Choose the default page size here and you won't have to set it in your apps.

## MAGIC SHUT DOWN

How do I shut down a Mac from the new Power Mac keyboard?

Simultaneously press the Control and Eject keys to summon the Shut Down dialog.

## WHAT WAS THAT PASSWORD?

We forgot the user password on our Mac OS X iBook. How do we reset it?

Boot your computer from the Mac OS X installer CD. From the Installer menu, choose Reset Password. You will be asked to enter a new password for any user on the system.



## DIFFICULTY RATINGS

EASY

No whining—  
anyone  
can do this!

TRICKY

It'll take some  
effort, but you  
can do it.

TOUGH

This stuff's  
for the pros.

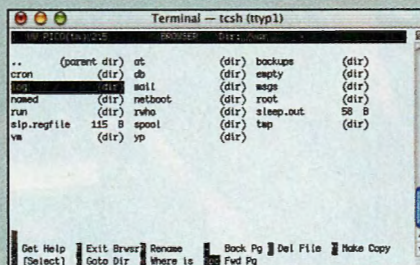
## UNIX UNIVERSITY

## BROWSING THE TERMINAL

What's the easiest way to browse for files in the Terminal?

The easiest way to fish for files is with the text editor pico and its file-browser feature.

At the command line, type `pico` and press return to launch pico. Press Control-R (the Read File command), then press Control-T (the To Files command) to enter the file browser. Now you can use your keyboard's arrow keys to scroll through your directories. Select the directory you want and press Enter, then Y (for yes) to open that directory. Sure, you can use the tried-and-true `cd` (change directory) command, which takes you right to a directory (type `cd directory name`), but this way is easier.

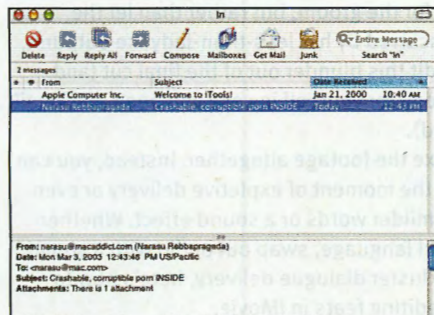


**Pico—boo! I see you. Troll directories with pico's file browser.**

## NO PREVIEW, PLEASE

Is it possible to disable the Preview pane in Mac OS X's Mail application?

Nope, but you can drag the divider in the main window all the way to the bottom. So if you get an email message that crashes Mail and you are unable to delete the problem message, hiding the preview pane will allow you to do so.



Drag the middle divider to the bottom of the window to hide the peep show.

## MOVING MUSIC

Can I move my iTunes songs onto a new drive and maintain all my playlists?

Yes. First, copy your iTunes folder from your Music folder (Users > user name > Music) to your new hard drive. Next, delete (or to be on the safe side, rename) your original iTunes folder. Finally, create an alias of the iTunes folder in the new location (which can be anywhere on your new drive) and put that alias into your Users > user name > Music folder, where the original iTunes folder was located.

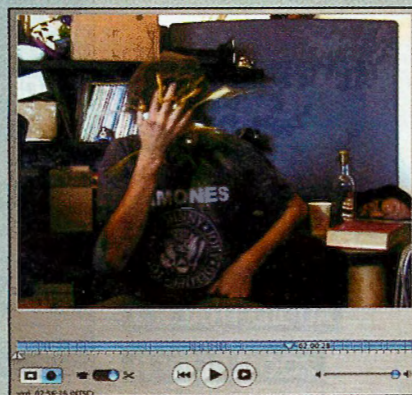
**Submit** technical questions or helpful tips directly via email ([askus@macaddict.com](mailto:askus@macaddict.com)) or c/o MacAddict, 150 North Hill Dr., Brisbane, CA 94005.

Six years of handling tech support for Apple, Power Computing, and a Texas school district have given Buz Zoller Mac superpowers.

## ThisMonth

## 66 Overdub Flubs in iMovie

Your family's expletive exchange may be fruitful on the home front, but you needn't preserve the tawdry tidbits for posterity in your home movies. Here are a few ways to clean up the act.



## 69 Trash Locked Files and Directories

Anna Nicole Smith, Michael Jackson, and John Tesh—it's easy to trash them, but not so with some Mac OS X files. If files or folders in your system defy your will to throw them away, get the not-so-secret command here and say good riddance.



## 70 Share iTunes Across a Network

Why spend time copying your favorite CDs onto every machine you occupy when you can turn one Mac into an iTunes jukebox and serve songs across your local network? Good question—and we've got the answer.

## 72 FTP for Free

Apps like Fetch, Transmit, and Interarchy cost money. If you're looking for a way to transfer files on the cheap, we show you a free way to FTP in Mac OS X.

## APPLEWORKS

How do you delete the recent items from the Starting Points window in AppleWorks?

Drag them from the Starting Points window directly to the Trash or manually delete the item aliases from the Users > user name > Documents > AppleWorks User Data > Starting Points > Recent Items folder.

## NO PHOTOS ON IPOD

Can you transfer digital photos from a camera's CompactFlash card directly to an iPod?

iPods play music, not pictures—but try SmartDisk's FlashTrax (\$499, [www.smartdisk.com](http://www.smartdisk.com)), a 30GB hard drive with a 3.5-inch preview screen and built-in MP3 player. (Note: it's USB, not FireWire.)

View pictures stored on a CompactFlash card with FlashTrax.





Kids with potty mouths sure are funny—until the parentals find out your movie's to blame. If a general audience is screening your movie, spare innocent ears by doing some audio editing.

**TIMELINE VIEWER (SHOWN)**

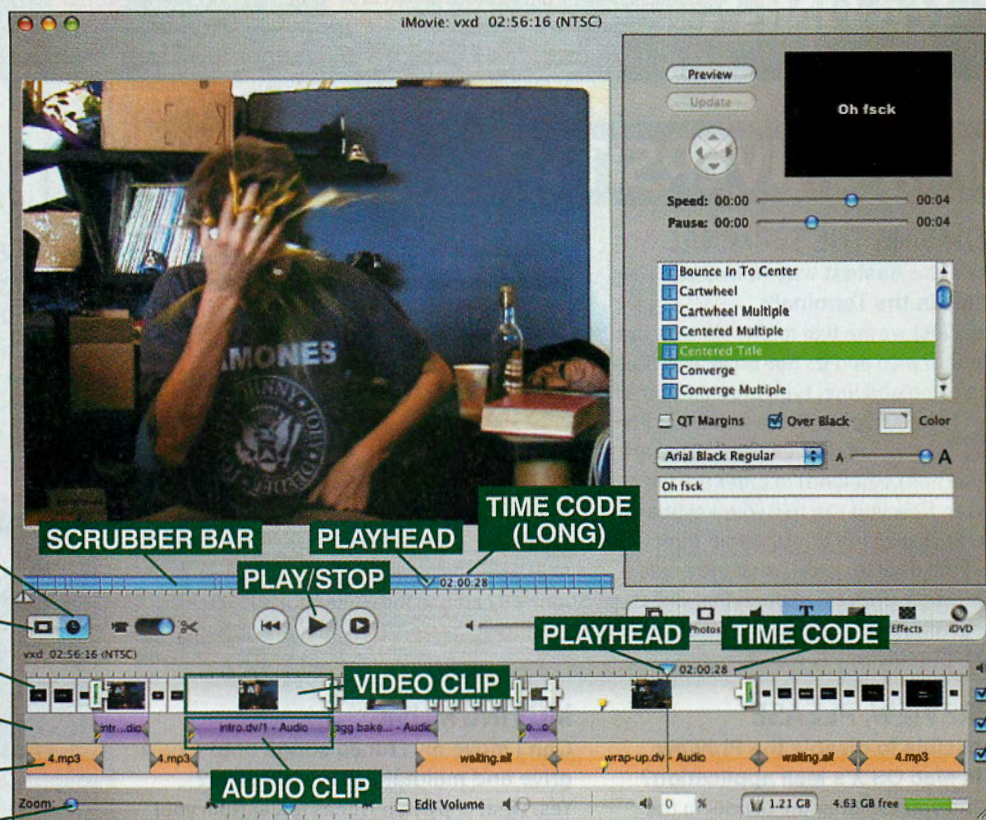
**CLIP VIEWER**

**VIDEO TRACK**

**AUDIO TRACK 1**

**AUDIO TRACK 2**

**ZOOM SLIDER**



# Overdub Flubs in iMovie

by Kris Fong



## WHAT YOU NEED

- iMovie 3 (free, [www.apple.com](http://www.apple.com))
- Microphone, internal or external (optional)

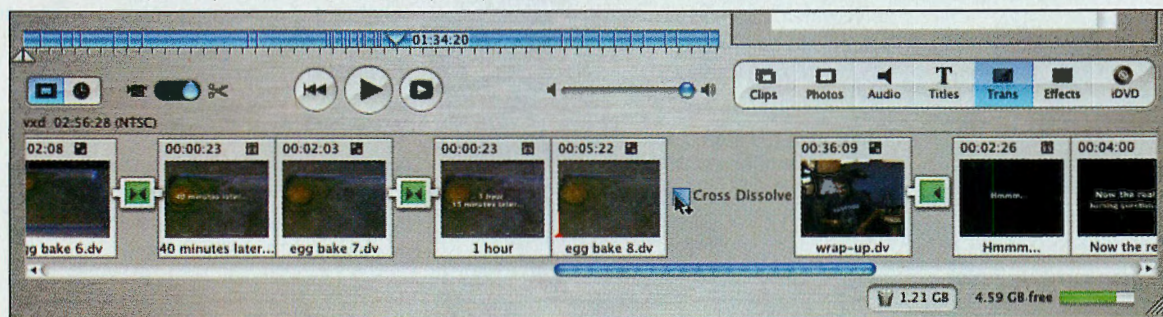
There's nothing like a beautiful summer wedding, and you—Mac-based moviemaking visionary that you are—aspire to capture every falling rose petal and every adoring gaze to create a romantic DVD for the happy couple. Suddenly, the bride lets loose an almighty string of obscenities when a bee lands on her bouquet. Woo-hoo—it's a wedding now! Sure, the scene would make great

rewind-button fodder for the groom, but rather than let the bride be emotionally scarred by her less-than-ladylike outburst, perhaps you should edit this blunder out of the final cut (and preserve an original copy for yourself in case you need blackmail material down the road).

You don't need to axe the footage altogether. Instead, you can drop out the sound at the moment of expletive delivery or even overdub the flub with milder words or a sound effect. Whether you want to silence foul language, swap out audio with a sound effect, or overdub lackluster dialogue delivery, here's how to perform these audio-editing feats in iMovie.

**1 Edit Your Movie First** Maybe you have a fast-cut, multiple-transition style of editing or maybe you prefer to just string clips together with few transitions. Either way, it's best to do your video editing before fiddling with the dialogue so you don't inadvertently unsync audio tracks

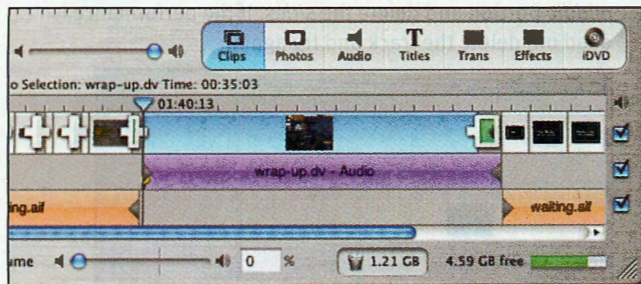
from video. Import your DV footage into iMovie, and then edit and sequence your clips together as you normally would in either clip viewer or timeline viewer mode. When you're finished, click the clock icon below the monitor screen to display your edited clips in the timeline viewer (if you weren't working in this mode already).



Because iMovie sometimes mishandles video and audio tracks, cobble together your movie in the clip viewer (shown here) or in the timeline viewer before swapping sounds.



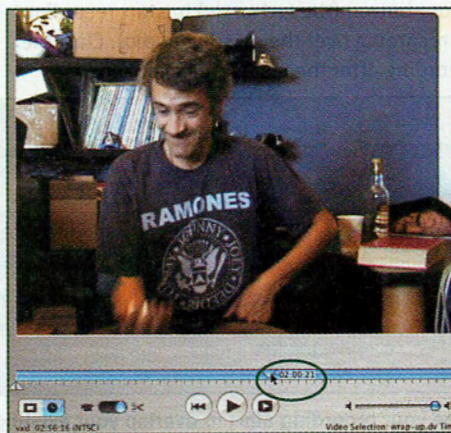
**2 Isolate Audio from Video** If you haven't changed iMovie preferences to import video and audio on separate tracks during the import process, you'll need to extract the audio from every video clip you wish to sound-edit. From the iMovie menu, select Preferences. In the resulting dialog, uncheck the Use Short Time Codes box so you have a tighter time reference to control your audio syncing, and then close the window. In the timeline, select a clip that contains objectionable audio or less-than-stellar delivery. From the Advanced menu, select Extract Audio to separate the clip's audio from its video—the audio clip appears as a purple bar in audio track 1 below your video clip in the timeline.



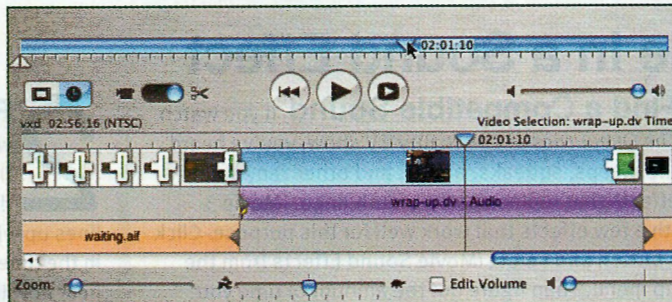
To edit audio, extract it from the video clip (if you haven't already set iMovie to do so automatically during DV import).

**4 Mark the Out Point** To find the precise point at which the audio you want to overdub ends, move the playhead in the scrubber bar to the point just after the last unwanted word is uttered (whether it's after a single word or phrase). Fine-tune by using the left-arrow key to nudge the playhead back a few frames to where you estimate the unwanted word ends, and jot down the time—this is your *out point*. Click the play button. If you hear part of the objectionable word, the playhead's too far left; if you hear part of a word that follows it, the playhead's too far right. Repeat this step as necessary until you find the exact out point.

**3 Mark the In Point** To find the precise beginning of the audio you want to edit, click the play button to hear the audio, and then drag the playhead in the scrubber bar to the point just before you hear the objectionable stuff. Fine-tune the position by pressing the right-arrow key to nudge the video forward one frame per key press. When you think you're at the right point, jot down the time displayed to the right of the playhead (this is your *in point*), and click the play button. If you hear the unwanted word clearly in its entirety—you've hit the mark. If not, scratch out the time and try again: If the word or phrase is chopped off, move the playhead left; if important dialogue preceding the unwanted stuff is chopped off, move the playhead right.

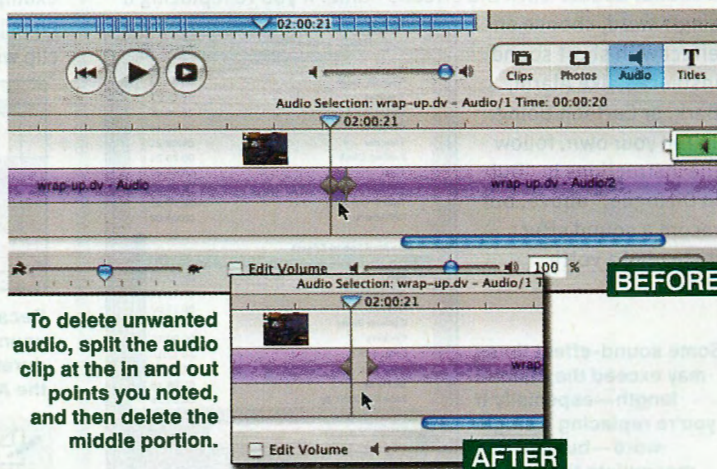


To make a precise edit, note the exact fraction of time (to the playhead's right) just before that first blunder occurs.



Find the exact end point of the unwanted audio by moving the playhead to the target region and then using the arrow keys to nudge it with precision.

**5 Drop Out the Audio** For better precision, move the Zoom slider (bottom left) to the right to zoom in on the timeline tracks. Click the audio clip to select it, and drag the playhead in the scrubber bar to the in point you jotted down in step 3—use the arrow keys to fine-tune. (Warning: Do not drag the playhead in the timeline. Doing so will cause your audio to unsync if you press an arrow key.) From the Edit menu, select Split Selected Audio Clip At Playhead to splice the clip. Press Shift-Command-A to deselect the clips, and then click the audio clip on the right. Drag the scrubber playhead to the out point you noted in step 4, split the audio clip at the playhead, and deselect the clips again. Then select the middle audio clip and press Delete. Now play back your video to check your handiwork—you shouldn't hear the unwanted audio. If you want to fill the silence with a vocal overdub or sound effect, read on.

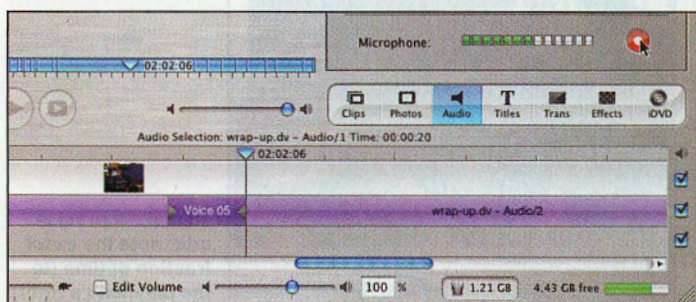


To delete unwanted audio, split the audio clip at the in and out points you noted, and then delete the middle portion.



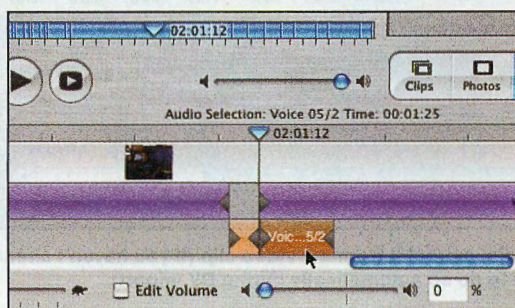
## Dub In Dialogue

**1 Punch In a Performance** You've seen this type of audio edit in any edited-for-TV movie and in *Star Wars: Attack of the Clones*. Preferably, you want the person who uttered the original words to record the overdub, but it's not a requirement. Click the Audio button to display the panel, and place your performer in front of your mic—either internal or external. Drag the playhead in the timeline to about 5 or 10 seconds before the dropout, and play the clip repeatedly so that he or she can study the speaker's lip movements and practice delivering the dialogue in sync. When ready, drag the playhead back, cue your performer, click play, and—just before the dropout comes up—click the record button (the red circle) to start recording (don't worry, you're not recording over the existing audio). Click the button again to stop recording after the last word is spoken.



Don't panic when you see your recording start to overlap your existing audio—you're not recording over it.

**2 Crop Extraneous Sounds** The overdub audio clip will appear to overlap the existing audio clips in audio track 1 in the spot where you deleted the original audio. To isolate the clip, drag it directly down to audio track 2 and click play to hear the performance. If the recording is out of sync, click the audio overdub clip and use the left- and right-arrow keys to nudge it so it's in sync with the video. Then crop the extra bits of audio before and after the dialogue delivery, using the split and delete methods discussed earlier, except that this time keep the *middle* portion and delete the *sides*. If the performance isn't dead on, delete the track and try again.

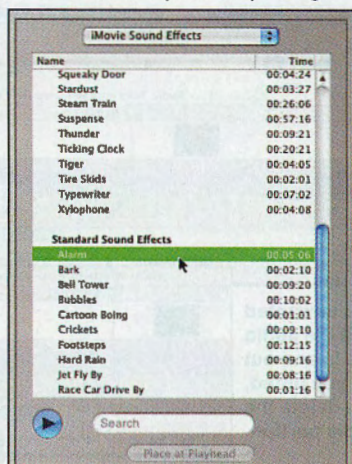


Once we recorded a golden performance, we split the audio clip twice and deleted the extra stuff before and after the overdubbed dialogue.

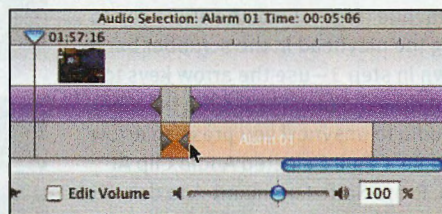
## Slide In a Sound Effect

**1 Find a Compatible Sound** If you watch *The Osbournes* or any reality-TV show, you've heard the bleeps, squeaks, honks, and other zany sound effects that replace potty-mouth lingo. iMovie 3 comes with a few effects that work well for this purpose. Click the Audio button and select iMovie Sound Effects from the top pop-up menu. Then figure out the amount of time you need to fill by calculating the time difference between the in and out points you jotted down. Use the sound-effect times displayed in the panel as a loose guide, choosing sounds that are close to but a bit longer than the length you need. To hear a sound, double-click the effect's name. If you're replacing a single word, choose an effect with short sound instances, like Alarm, Bark, or Cartoon Boing. To roll your own, follow the instructions in "Dub In Dialogue," above, but record a sound effect instead of a voice.

Some sound-effect times may exceed the needed length—especially if you're replacing a single word—but you can manipulate them to fit.



**2 Resize to Shorten** When you find a sound that works within your time needs, drag the effect's name from the audio pane down to audio track 2, below the audio dropout in audio track 1. Move the clip so that its left edge lines up with the point where the dropout occurs. Drag the playhead in the timeline a few seconds prior to this spot, and play the clip to hear how the effect works here. Use the arrow keys to fine-tune the effect's placement if needed. If the clip is longer than the space, drag the right edge of the sound-effect clip to the left to shorten its duration (you can't slice an iMovie sound effect). Play the clip again; if the sound effect gets chopped off midway through a sound (for example, the second bark in Bark), shorten the clip a bit more so it ends just after the last completed instance—the remainder of the clip will play a fraction of silence.



Because you can't slice and dice iMovie's sound effects, resize the clip—shortening its duration—to fit your needs. Here, we shortened the Alarm effect to just one sound instance.

Kris Fong had quite a few choice words to say about iMovie 3's performance on an iBook, but this bio has been edited for content.



# Trash Locked Files and Directories

by Kris Fong

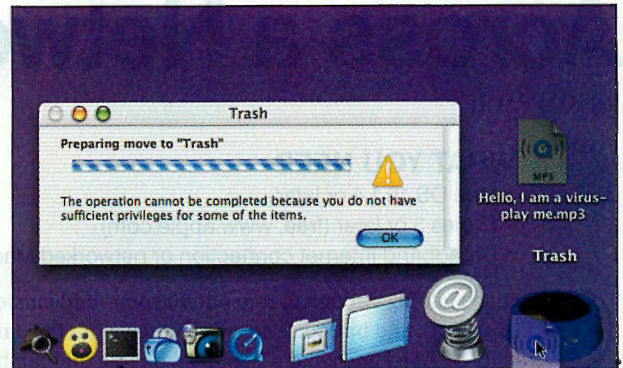


## WHAT YOU NEED

- Mac OS X (\$129, [www.apple.com](http://www.apple.com))
- Administrator privileges

Taking out the trash isn't a difficult chore—just ask any nagging spouse or parent. But when it comes to tossing stuff into the Trash in Mac OS X, complications can arise. For example, if you installed Fink from our “Run Unix Apps in Mac OS X” tutorial (May/03, p64), you may have discovered that you can't budge the `sw` folder Fink created in the root directory.

If you've ever tried to throw away a file or folder and promptly been told you didn't have the proper permission, here's how to get rid of those stubborn squatters via the Terminal. Warning: Once you dump, you can't undo.



For troublesome trash, use the Terminal to remove files and folders—now if only we could use this dialog's excuse on garbage night.

**1 Try Unlocking First** Before you resort to chucking a file via the Terminal, try unlocking that file first—especially if you see a small padlock attached to its icon. Select the file or folder icon and press Command-I (Get Info). In the resulting window, uncheck the Locked box, close the window, and throw away the item. If there's no check in the Locked box or if the box is grayed out, read on.



That little padlock indicates that a file's locked. Before firing up the Terminal, try unlocking the file via Get Info first.

**2 Journey to the Junk** To remove files or directories (aka folders), first navigate to the directory that houses them. Launch the Terminal. At the prompt, type `cd` (change directory), press the space bar, type the path to the target directory, and press Return. For example, to remove, say, some stubborn installer-log file, type `cd /Documents/"Installer Logs"` to navigate to the Installer Log folder—the parent directory. Use the list command (`ls`) to list directory contents so you can get to where you need to be. Enclose multiword file and directory

```

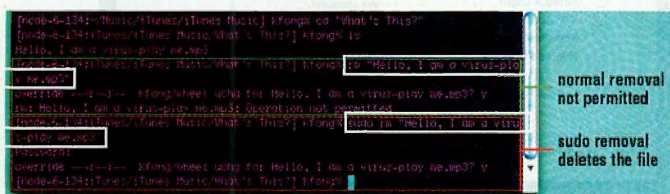
Last login: Mon Mar 3 13:40:05 on ttty1
Welcome to Darwin!
[krong@-134:~] krong% ls
Canon S230  review  Movies          Public
Desktop      Documents  Music           Sites
Icon?        Pictures   netunes_InstallLog.log

[krong@-134:~] krong% cd Music/iTunes/"iTunes Music"
[krong@-134:~/Music/iTunes/iTunes Music] krong% ls
Aimee Mann  Disturbed  Leon  Mindgames  Storm Inc.  Veruca Salt
Awanda Ghost  Hoobastank  Linkin Park  Mischief  Vegas DeMilo  What's This?
[krong@-134:~/Music/iTunes/iTunes Music/What's This?] krong% ls
Hello, I am a virus-play me.mp3
[krong@-134:~/Music/iTunes/iTunes Music/What's This?] krong%
  
```

names in double quotes ("`"`"), and remember that command-line text is case sensitive.

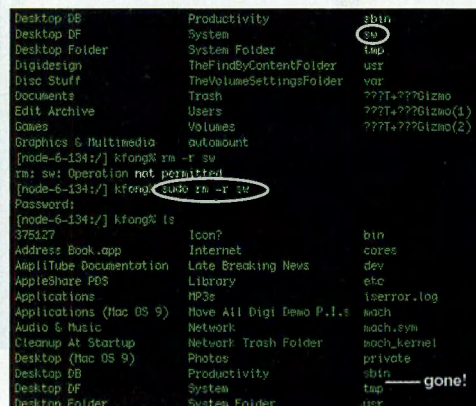
We used the change directory (`cd`) and list (`ls`) commands to navigate to this tenacious MP3 file.

**3 Fling Out Files** To remove a file, you generally type `rm file name`, where `file name` is the file's full name. However, with files for which you don't have privileges, OS X won't permit you to do so. To circumvent this obstacle, you must assume the role of the great and powerful root user. Type `sudo` (superuser do), press the space bar, type `rm` (remove), press the space bar again, type the file name, and press Return. At the Password prompt, type your admin password and press Return. If asked to override permissions, type `y` for yes and press Return. This will remove the file. To remove multiple files, list all the file names after the command, with a single space between file names: `sudo rm file name 1 file name 2 file name 3` and so forth.



To delete unmovable files, type `sudo` (to execute a single command as root) prior to typing `rm` (to remove directory entries).

**4 Delete Directories** To remove a directory and its contents, navigate to its parent directory and type `sudo rm -r directory name`, where `directory name` is the full name of the directory, and press Return. For example, to remove Fink's `sw` directory, we typed `sudo rm -r sw`. When asked for an administrator password, type it in and press Return.



After listing the root directory's contents, we removed Fink's `sw` directory with one command.

Kris Fong loves to talk trash but has an aversion to taking it out.



# Share iTunes Across a Network

by Kris Fong

EASY

## WHAT YOU NEED

- Mac OS 10.1.4 or later
- iTunes 3 or later (free, [www.apple.com](http://www.apple.com))
- Broadband Internet connection or networked Macs

Our bag ain't big enough to tote our 30 some-odd music CDs to work and back just so we can drown out the daily reality-TV spiel and what's-for-lunch babble that tumbles over our cubicle walls (thanks, *Joe Millionaire* and *Maximum PC*). Short of burning copies of every CD for permanent work storage or filling up our precious hard drive with MP3s, what's a Mac music addict to do? Create an iTunes music server that we can share



with others, of course. Cost of setting up a music server: zero dollars. Cost of iTunes software for you and your friends: zero dollars. Satisfaction in knowing that your actions will probably churn the steely guts of the RIAA: priceless.

**1 Sign Up Your Clients** Just so we're clear, we'll refer to the Mac that holds your iTunes collection as the jukebox server and any Mac that you want connected to it as a client. On your jukebox server, create a user for every client to whom you want to give access—whether it's an actual human being or one of your other Macs stationed around the house or at work. From the Apple menu, select System Preferences, and click the Accounts preference to display its options. Click the Users tab and click New User. In the resulting panel, type a name in the Name field, type a password in the New Password field, type the password again in the Verify field, and then click OK. Repeat for any other clients.



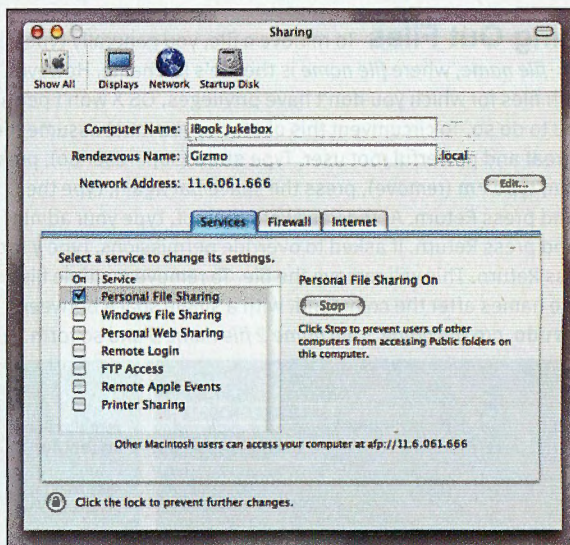
Create a user for every Mac place or person to whom you want to allow access to your iTunes collection.



It's easy to stream your MP3 collection to others, but you might want to weed out your guilty pleasures first.

Whether you're in a similar predicament or simply want to listen to music files on a different Mac than the one where the files are stored, it's easy to set up iTunes to function as a pseudo music-streaming server. Yes, there are different ways to share your music collection with other machines (and no, we're not implying that you go down that Napster-style bad-boy route). Here, we present one simple, perfectly legal method that doesn't require a third-party app such as Shirt Pocket's netTunes ([www.shirt-pocket.com](http://www.shirt-pocket.com)), SearchWare Solutions' iHam on iRye ([www.swssoftware.com](http://www.swssoftware.com)), or Malia Software's MP3 Sushi ([www.maliasoft.com](http://www.maliasoft.com)); that doesn't require copying MP3 files to any hard drive; and that allows clients to play your tunes using your Music Library file.

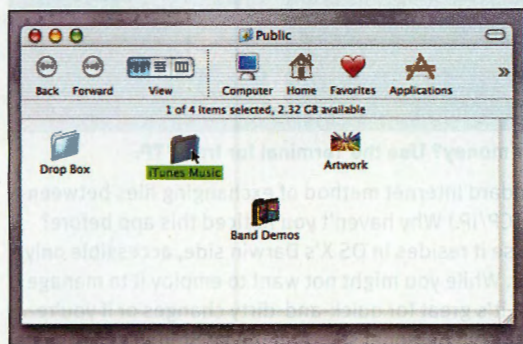
**2 Start Sharing** Click the Show All icon in the System Preferences window to display everything, and then click the Sharing preference to display its options. Type a name for your jukebox server in the Computer Name field (if one isn't there already), click the Services tab, and then check the Personal File Sharing box to turn on file sharing. Wait a few seconds for the process to start up, and then jot down the network address that appears at the bottom of the window. It'll start with `afp://`, followed by the address—a jumble of numbers and/or words—that your clients will need to connect to your jukebox remotely. Then close the window.



Turn on File Sharing to allow any authorized user to access your Public folder, where you'll store your tunes.

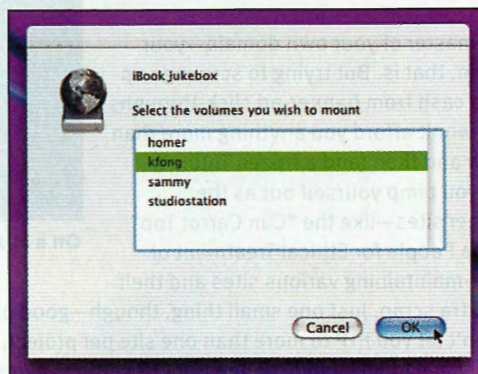


**3 Move Your Music** By default, iTunes 3 stores all music brought into the application inside your iTunes Music folder, located at Users > *user name* > Music > iTunes > iTunes Music, but you can move this folder and its contents anywhere. However, Apple hardwired your iTunes 3 Music Library—the file that lists your songs within the iTunes interface—to operate strictly within your user's iTunes folder. To give clients access to your music collection, move your iTunes Music folder into your user's Public folder. To allow others to view your jukebox song list within their iTunes app, make a copy by Option-dragging the iTunes 3 Music Library file from the iTunes folder to your Public folder. (If you later add songs to the jukebox, copy the updated music library file to your Public folder and tell your denizens to replace their current file with the updated one.)



To give others access to your tunes, place your iTunes Music folder in your Public folder.

**4 Connect to the Jukebox** On a client machine, log in to the jukebox server by either launching a Web browser or selecting Connect To Server from the Go menu. In the address or URL field, type `afp://`, followed by the jukebox's server address, and press Return. In the resulting network dialog, type a user name and password for the jukebox server in the appropriate fields, and click Connect. A dialog pops open, containing a list of each user volume you created for the jukebox server; select the volume name that holds the iTunes Music folder, and click OK to mount the volume on the desktop.



Make sure to mount the user volume that contains the iTunes Music files.

**5 Set Up an iTunes Client** To enable a client to view your jukebox song list within the iTunes app and stream music from the server, you need to do some reconfiguring. To preserve a client's current iTunes data, go to the iTunes folder (Users > *user name* > Music > iTunes), and rename this folder as *iTunes old* or the like. Then create a new folder in this location and name it iTunes. Open the jukebox volume and drag the iTunes 3 Music Library file to this iTunes folder (make sure the file name appears exactly as mentioned). Then create an alias of the iTunes Music folder on the jukebox server (Command-L), and drag it to the client's iTunes folder to copy it. Delete the word *alias* and the space that precedes it from the folder name so that it's just *iTunes Music*.



After creating an alias, lop off that alias tag to keep the iTunes Music name intact.

**6 Crank Up the Tunes** To play any song from the jukebox server, launch iTunes on a client machine and select a tune; the jukebox's song list appears as the default Library, and songs play directly from the jukebox server. For quick access, make an alias of the mounted jukebox volume. Depending on your connection speed, the jukebox should be able to handle multiple streams across a LAN (local-area network)—we had four networked Macs simultaneously playing the same song without any hiccups, but we can't promise anything if you decide to invite 100 or so of your closest Mac maniacs to partake in your jukebox jollies. With broadband Internet connections, you may experience a few burps now and then, so we don't recommend trying this if you have a dial-up connection.



Because you pulled a switcheroo with the iTunes 3 Music Library file, the jukebox server's song list will appear when a client launches iTunes.

Kris Fong admits to owning a Winger album but chose to spare her jukebox listeners from wailing Aquanet-laden '80s bands.



# FTP for Free

by Mary E. Tyler



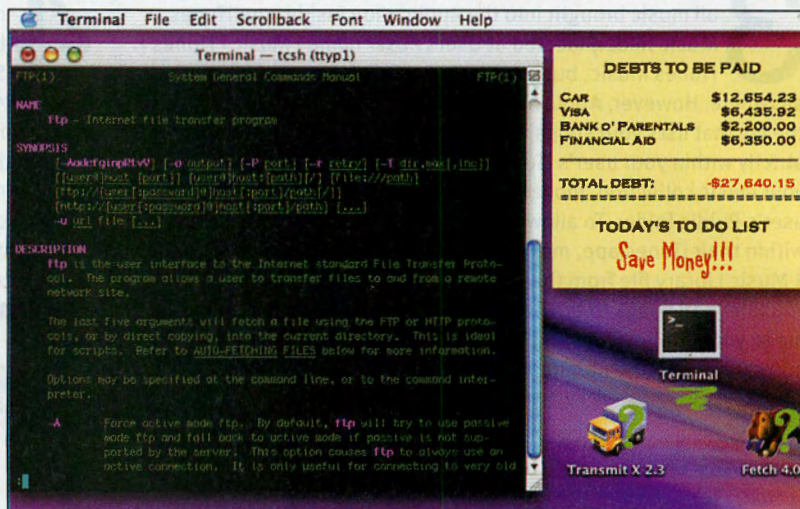
## WHAT YOU NEED

- Mac OS X (\$129, [www.apple.com](http://www.apple.com))
- An Internet connection
- Access to a remote server

You are the master of your own domain—your Web domain, that is. But trying to scrounge up some extra cash from banner-ad click-throughs on your Web site won't afford you anything more than a pizza every now and then (and a frozen Totino's one at that!). So you pimp yourself out as the Webmaster of other sites—like the “Can Carrot Top” protest site for the People for Ethical Treatment of AT&T Customers—maintaining various sites and their mirrors to earn extra scrap. Just one small thing, though—good ol' Dreamweaver won't let you FTP to more than one site per project. That means you'll have to go in and change the FTP settings every time you update each mirror on each Web site. And you really don't want to have to shell out extra for an FTP program.



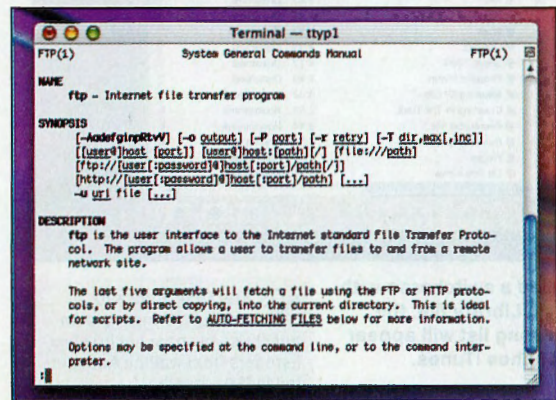
Buck up, buckaroo—things aren't so grim. Mac OS X has a built-in FTP client, aptly named FTP (file transfer program), that lets you transfer files to and from any FTP-enabled server. (For the uninitiated, FTP stands for file transfer



On a mission to maintain your money? Use the Terminal for free FTP.

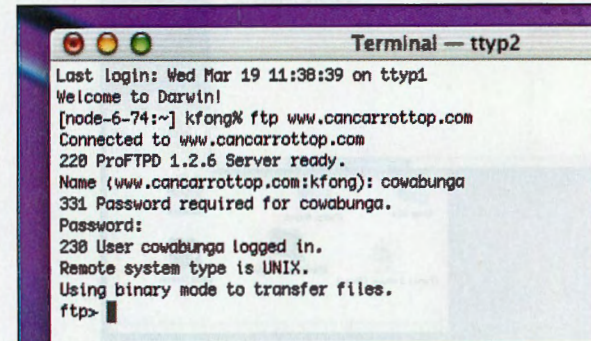
protocol, a standard Internet method of exchanging files between computers via TCP/IP.) Why haven't you noticed this app before? Probably because it resides in OS X's Darwin side, accessible only via the Terminal. While you might not want to employ it to manage huge Web sites, it's great for quick-and-dirty changes or if you're maintaining your own personal site. And unlike Stairways Software Interarchy (formerly Anarchie; \$45, [www.interarchy.com](http://www.interarchy.com)), Fetch Softworks Fetch (\$25, [www.fetchsoftworks.com](http://www.fetchsoftworks.com)), and Panic Transmit (\$24.95, [www.panic.com](http://www.panic.com)), it's free. Here's how to use FTP to upload files to and download them from a remote server.

**1 Help Me, Man!** If you're not comfy cozy with commanding Unix apps, we recommend perusing the FTP manual first to gain insight on various options (aka flags) that you can apply to the program's use. So call up the man—Unix's manual command. Launch the Terminal (Applications > Utilities > Terminal). At the prompt, type **man ftp** and press Return to have the Terminal display the FTP manual. Press the Return key to scroll down line by line or the space bar to page down (the window's scroll bar and arrows won't work here). You can leave this window open for reference if needed. Then open a new window (aka a shell) by pressing Command-N. (If you're curious about other Unix commands, type **man**, press the space bar, type a Unix command, and press Return to call up its manual.)



Though the scroll bar indicates otherwise, this is not the end of the manual—press the Return key or space bar to scroll through it in its entirety.

**2 Open (Sesame)** To open an FTP connection, just type **ftp**, press the space bar, type in the server address or Web site's URL, and press Return. For example, we typed **ftp www.cancarrottop.com**, and then pressed Return to open our gateway to the Carrot Top protest site. FTP will connect to the site and ask you to log in. After the Name prompt, type your user name for the site and press Return. At the Password prompt, type your password and press Return. The Terminal will then display a confirmation that you're logged in, followed by the remote computer's system type in the line below it.



Once you've logged in to a site via FTP, the Terminal displays the remote computer's system-platform type.



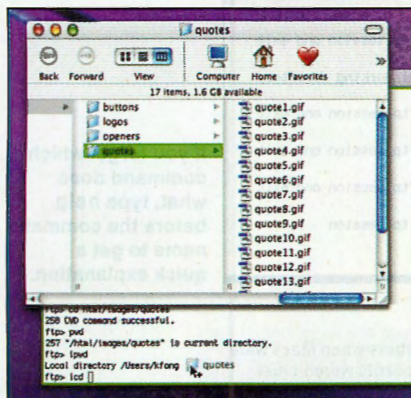
**3 Set the Transfer Mode** You may be on a Mac, but your hosting server may be running a different platform. Therefore, set the transfer mode—either ASCII or binary—to ensure that your file doesn't get garbled in transit. The Terminal displays the current mode below the line that states the remote system type. Use ASCII for text transfers, such as HTML files; use binary for everything else, like media files and graphics. To change modes, simply type the mode you want FTP to use. For example, to transfer text files, switch from binary to ASCII mode by simply typing **ascii** at the prompt and pressing Return. If you need to switch to binary mode, type **binary** at the prompt and press Return.

```

Terminal — ttty1
Last login: Wed Mar 19 11:38:39 on ttty1
Welcome to Darwin!
[kfang@~] kfang% ftp www.cancarrottop.com
Connected to www.cancarrottop.com
220 ProFTPD 1.2.6 Server ready.
Name (www.cancarrottop.com:kfang): cowabunga
331 Password required for cowabunga.
Password:
230 User cowabunga logged in.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> ascii
200 Type set to A.
ftp> binary
200 Type set to I.
ftp>
  
```

Set the transfer mode to ASCII by typing **ascii** if you want to upload text files; use **binary** for everything else.

**5 Set the Destination** To choose the download destination for files on your Mac (your local drive), preface navigational commands with a lowercase **l**, as in *lollygagger*. For example, typing **lpwd** displays the path of your Mac's current directory (as opposed to typing **pwd**, which displays the path of the server's current directory). Type **lcd**, press the space bar, and then type the path to the target local directory, separating each directory with a slash (/) and enclosing multiple word names in quotes (""). If the file path is long, try this shortcut: Type **lcd**, press the space bar, drag and drop the target folder from a Finder window onto the Terminal window, and press Return to change to that directory. Unfortunately, if this path includes directory names with special characters, this shortcut may not work—in that case, you'll have to type the path the long way.



If you want to avoid typing a lengthy path name to change directories, drag and drop the desired folder onto the Terminal window.

**4 Find the Files** OK, time to get down to business. For demonstration purposes, follow our example, but you can apply the instruction to your own files. In our example, every one of our Can Carrot Top pages sports a GIF image of a quote. Our job today is to download the current quote files from the server, update them, and then upload the new ones. First, navigate to the server directory that houses your target files using the **cd** (change directory) command—we typed **cd html/images/quotes** to navigate to our *quotes* directory. Type **pwd** (print working directory) if you need to view the path name of your current directory so you can figure out where you're at. FTP uses the same navigational commands as the Terminal to help you troll through a remote server. To navigate through your local drive, you must add one extra letter, as you'll see in the next step.

```

Terminal — ttty1
Last login: Wed Mar 19 11:38:39 on ttty1
Welcome to Darwin!
[kfang@~] kfang% ftp www.cancarrottop.com
Connected to www.cancarrottop.com
220 ProFTPD 1.2.6 Server ready.
Name (www.cancarrottop.com:kfang): cowabunga
331 Password required for cowabunga.
Password:
230 User cowabunga logged in.
Remote system type is UNIX.
Using binary mode to transfer files.
ftp> ascii
200 Type set to A.
ftp> binary
200 Type set to I.
ftp> cd html/images/quotes
250 CWD command successful.
ftp> pwd
257 "/html/images/quotes" is current directory.
ftp>
  
```

Here, we navigated to our server's *quotes* directory using the **cd** command, and then typed **pwd** to make sure we were really there.

**6 Come and Get It** To download a single file, simply type **get**, press the space bar, type the file name, and press Return. For example, we typed **get quote1.gif** to download our quote1.gif file (make sure the transfer mode is set correctly for your file—we used binary for our GIFs). If you need to grab stuff in bulk and your files are similarly named, do what we did instead of grabbing files one by one; we typed **mget quote\*.gif** and pressed Return to download all files whose names begin with *quote* and end with *.gif* (apply your own semantics). The asterisk (\*) is a wild card that stands for any unspecified characters. For each file that matches the pattern, **mget** will ask if you want to download it—just press Return if you do, or type **n** (no) and press Return if you don't.

```

Terminal — tssh (ttty1)
ftp> lcd /Users/kfang
Local directory /Users/kfang
ftp> lcd /Volumes/MyMac/Projects/CanCarrotTop.com/images/quotes
Local directory now /Volumes/MyMac/Projects/CanCarrotTop.com/images/quotes
ftp> ls
227 Entering Passive Mode (65,193,193,11,230,65).
150 Opening ASCII mode data connection for file list
-rw-r--r-- 1 cowabunga cowabunga 13064 Mar 4 07:35 psstolive.jpg
-rw-r--r-- 1 cowabunga cowabunga 3617 Mar 4 07:35 quote1.gif
-rw-r--r-- 1 cowabunga cowabunga 5023 Mar 4 07:35 quote1B.gif
-rw-r--r-- 1 cowabunga cowabunga 6110 Mar 4 07:35 quote2.gif
-rw-r--r-- 1 cowabunga cowabunga 4207 Mar 4 07:35 quote2B.gif
-rw-r--r-- 1 cowabunga cowabunga 4952 Mar 4 07:35 quote3.gif
-rw-r--r-- 1 cowabunga cowabunga 4952 Mar 4 07:35 quote3B.gif
-rw-r--r-- 1 cowabunga cowabunga 4952 Mar 4 07:35 quote4.gif
-rw-r--r-- 1 cowabunga cowabunga 4952 Mar 4 07:35 quote4B.gif
-rw-r--r-- 1 cowabunga cowabunga 4952 Mar 4 07:35 quote5.gif
-rw-r--r-- 1 cowabunga cowabunga 4952 Mar 4 07:35 quote5B.gif
ftp> get quote1.gif
local: quote1.gif remote: quote1.gif
227 Entering Passive Mode (65,193,193,11,230,65).
150 Opening BINARY mode data connection for quote1.gif (3617 bytes)
100% (#####) 3617 647.37 KB/s
00:00 ETA
226 Transfer complete.
3617 bytes received in 00:00 (22.37 KB/s)
ftp> mget quote*.gif
mget quote1.gif [no]?
227 Entering Passive Mode (65,193,193,11,230,65).
150 Opening BINARY mode data connection for quote1.gif (3617 bytes)
100% (#####) 3617 647.37 KB/s
00:00 ETA
226 Transfer complete.
3617 bytes received in 00:00 (23.16 KB/s)
mget quote2B.gif [no]?
227 Entering Passive Mode (65,193,193,11,230,66).
150 Opening BINARY mode data connection for quote2B.gif (5023 bytes)
100% (#####) 5023 65.31 KB/s
  
```

Because we have several similarly named GIF files, we typed **mget quote\*.gif** to download every one in the numbered series.



**7 Put That Back** After you're done updating your files, upload them back onto your Web hosting server. You can choose to do this a file at a time by typing **put**, pressing the space bar, typing the file name, and pressing Return (that is, **put quote1.gif**), or use the command **mput** as you used **mget** in step 6. Remember, FTP operates within the remote and local directories you specify—if you download a file, update it, and then move it to another folder, you'll need to change your current local directory via the Terminal to upload that file back to the server.

```

Terminal - tcsh (tty1)

ftp> ls
Local directory /Users/kfong
ftp> lcd /Mideout/Working/Copywriting/Projects/CanCarrotTop.com/images/quotes
Local directory now /Mideout/Working/Copywriting/Projects/CanCarrotTop.com/images/quotes
ftp> mput quote*.gif
mput quote1.gif [mput?]?
227 Entering Passive Mode (65,193,193,11,238,144)
150 Opening BINARY mode data connection for quote1.gif.
100% |=====| 25209 53.49 KB/s 00:00 ETA
226 Transfer complete.
25209 bytes sent in 00:00 (31.51 KB/s)
mput quote18.gif [mput?]?
227 Entering Passive Mode (206,57,18,14,29,216)
150 Opening BINARY mode data connection for quote18.gif.
100% |=====| 16833 30.62 KB/s 00:00 ETA
226 Transfer complete.
16833 bytes sent in 00:00 (22.52 KB/s)
mput quote11.gif [mput?]?
227 Entering Passive Mode (206,57,18,14,29,216)
150 Opening BINARY mode data connection for quote11.gif.
100% |=====| 46979 335.64 KB/s 00:00 ETA
226 Transfer complete.
46979 bytes sent in 00:00 (246.42 KB/s)
mput quote12.gif [mput?]?
227 Entering Passive Mode (206,57,18,14,29,216)
150 Opening BINARY mode data connection for quote12.gif.
100% |=====| 22800 292.82 KB/s 00:00 ETA
226 Transfer complete.
22800 bytes sent in 00:00 (111.92 KB/s)
mput quote13.gif [mput?]?
227 Entering Passive Mode (206,57,18,14,29,216)
150 Opening BINARY mode data connection for quote13.gif.

```

To upload your files, use the **put** command for single files or **mput** for multiple uploads.

**9 Move Stuff into New Places** We got a call from our client, telling us that quotes 1 and 5 are now obsolete. We don't want to delete the files just in case the client changes his mind. Instead, we can put them into a new directory. To create a new directory, navigate to the parent directory in which you want the new directory to appear, and type **mkdir new directory name** (for example, we typed **mkdir old\_quotes** to create a new directory called *old\_quotes* within our quotes directory). If you're dyslexic like us and mistype the directory name, remove the directory by typing **rmdir directory name typo**. Then move files by using the **rename** command as you did in step 8.

```

Terminal - tcsh (tty3)

ftp> mkdir old_quotes
257 "/html/images/quotes/old_quotes" - Directory successfully created
ftp> rmdir old_quotes
258 RMD command successful.
ftp> mkdir old_quotes
257 "/html/images/quotes/old_quotes" - Directory successfully created
ftp> rename quote1.gif old_quotes/quote1.gif
350 File or directory exists, ready for destination name.
250 rename successful.
ftp> rename quote5.gif old_quotes/quote5.gif
350 File or directory exists, ready for destination name.
250 rename successful.
ftp> ls
227 Entering Passive Mode (65,193,193,11,238,163)
150 Opening ASCII mode data connection for file list
daz-xz-x 2 cowbunga cowbunga 4896 Mar 16 13:43:01 old_quotes
-rw-r--r-- 1 cowbunga cowbunga 3661 Mar 16 07:35 psprvise.tif
-rw-r--r-- 1 cowbunga cowbunga 5823 Mar 16 13:44 quote18.gif
-rw-r--r-- 1 cowbunga cowbunga 6118 Mar 16 13:44 quote2.gif
-rw-r--r-- 1 cowbunga cowbunga 4287 Mar 16 13:44 quote3.gif
-rw-r--r-- 1 cowbunga cowbunga 4652 Mar 16 13:44 quote4.gif
-rw-r--r-- 1 cowbunga cowbunga 4462 Mar 16 13:44 quote5.gif
-rw-r--r-- 1 cowbunga cowbunga 5326 Mar 16 13:44 quote7.gif
-rw-r--r-- 1 cowbunga cowbunga 4884 Mar 16 13:44 quote8.gif
-rw-r--r-- 1 cowbunga cowbunga 6122 Mar 16 13:44 quote9.gif
-rw-r--r-- 1 cowbunga cowbunga 3285 Mar 16 13:44 quote1a1.gif
-rw-r--r-- 1 cowbunga cowbunga 7234 Mar 16 13:44 quote1a2.gif
-rw-r--r-- 1 cowbunga cowbunga 7866 Mar 16 13:44 quote1a3.gif
-rw-r--r-- 1 cowbunga cowbunga 9697 Mar 16 13:44 quote1a4.gif
-rw-r--r-- 1 cowbunga cowbunga 8612 Mar 16 13:44 quote1a5.gif

```

**Removes directory**

**Creates new one**

To create new directories on a remote computer, use the **mkdir** (make directory) command.

**8 Fix Boo-Boos** We accidentally uploaded two nonquote files—one of which we shouldn't have uploaded at all, and another that should've gone into our parent *images* directory instead of our quotes directory. No problem. To get rid of a file, type **delete** followed by the unwanted file's name—we typed **delete zdonate\_Can\_Carrot\_Top.gif** to remove that GIF. To move a file from one directory to another, you can't just drag and drop as in the Mac OS; you have to rename the file with a new path. To move our *sign\_our\_petition.gif* file, we typed **rename sign\_our\_petition.gif (space) ../sign\_our\_petition.gif**. The command **../** before the second argument means "the parent of the present working directory," which is our *images* directory. Likewise, we could also do the same move by typing this out the long way: **rename sign\_our\_petition.gif (space) /html/images/sign\_our\_petition.gif**.

```

Terminal - tcsh (tty1)

ftp> ls
227 Entering Passive Mode (65,193,193,11,238,144)
150 Opening ASCII mode data connection for file list
-rw-r--r-- 1 cowbunga cowbunga 3861 Mar 16 07:35 psprvise.tif
-rw-r--r-- 1 cowbunga cowbunga 3617 Mar 16 13:44 quote1.gif
-rw-r--r-- 1 cowbunga cowbunga 5823 Mar 16 13:44 quote18.gif
-rw-r--r-- 1 cowbunga cowbunga 6118 Mar 16 13:44 quote2.gif
-rw-r--r-- 1 cowbunga cowbunga 4287 Mar 16 13:44 quote3.gif
-rw-r--r-- 1 cowbunga cowbunga 4652 Mar 16 13:44 quote4.gif
-rw-r--r-- 1 cowbunga cowbunga 4462 Mar 16 13:44 quote5.gif
-rw-r--r-- 1 cowbunga cowbunga 5326 Mar 16 13:44 quote7.gif
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-rw-r--r-- 1 cowbunga cowbunga 7866 Mar 16 13:44 quote1a3.gif
-rw-r--r-- 1 cowbunga cowbunga 9697 Mar 16 13:44 quote1a4.gif
-rw-r--r-- 1 cowbunga cowbunga 8612 Mar 16 13:44 quote1a5.gif
ftp> delete zdonate_Can_Carrot_Top.gif
350 DELE command successful.
ftp> rename sign_our_petition.gif ../sign_our_petition.gif
350 File or directory exists, ready for destination name.
250 rename successful.
ftp>

```

In the Unix world, if you want to move a file between directories, you must rename the file with a new path name.

**10 Say Good-Night** Finally, your work is done. Now what? Time to terminate. There are a few different ways to terminate an FTP connection. To terminate the connection without quitting FTP, just type **close** and press Return. If you want to quit FTP and close your connection, type **bye**, **exit**, or **quit** and you'll return to the original shell. For future reference, if you forget which commands the Terminal understands, type **help** and press Return from within FTP and it'll list them. Typing **help command name** gives you a one-line explanation of what that command does. OK, go geek out!

```

Terminal - tcsh (tty)

ftp> help quit
quit terminate ftp session and exit
ftp> help lcd
lcd change local working directory
ftp> help quit
quit terminate ftp session and exit
ftp> help bye
bye terminate ftp session and exit
ftp> help exit
exit terminate ftp session and exit
ftp> help close
close terminate ftp session
ftp> quit
quit terminate ftp session
ftp>
<OS X Junkie>

```

If you forget which command does what, type **help** before the command name to get a quick explanation.

Mary E. Tyler remembers when Macs were expensive and FTP clients weren't just cheap—they were free.



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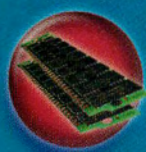
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256MB " " Low Profile **\$65.99**

## Legacy Macs

PowerMac 7217/375/76/85/86/95/9600 & Clones



**128MB Mac 5V DIMM ONLY \$25.99!**

Get up to 512MB, 1GB, or MORE - 100% compatible with  
G3/G4 upgrades, great for memory starved applications  
& OS X too!

OWC Stocks Memory for just about EVERY  
Apple Mac/Clone made! Call or visit our  
website [www.MacSales.com](http://www.MacSales.com) to get the right  
memory for your Mac!

## 3.5" SCSI drives

For any Mac tower / desktop model with built-in SCSI



**9GB IBM UltraStar 36ES**  
**Low Profile only \$45.97!**

7200RPM, 6.5ms, 1yr OWC Warranty

**18.4GB IBM UltraStar 73LZX 10k RPM \$89.99**

4.9ms, low profile, w/ 1yr

**36.4GB IBM UltraStar 36LZX 10k RPM \$129.99**

4.9ms, low profile, w/ 1yr

**36.7GB Seagate Barracuda 7200 RPM \$229.99**

8.5ms, low profile, w/ 3yr

**73.4GB IBM UltraStar 73LZX 10k RPM \$239.99**

4.9ms, low profile, w/ 1yr

## ATA/IDE PCI cards

Have a PowerMac with an available PCI slot? Any of these will  
let you fully utilize IDE / ATA drives! All products listed support  
up to 4 IDE/ATA drives, made just for Mac, and are fully  
compatible/bootable with Apple OS 8.x, 9.x, and OS X 10.x



**SIIG Ultra133**  
**ATA/IDE \$75.99**



**Sonnet Temp Trio**  
**PCI Combo \$179.99**

More than Just an ATA Card, Trio also adds FireWire and USB  
1.1/2.0 to your Mac all with ONE PCI Card!

**Acad AHARD Mac ATA/133 PCI Interface \$79.99**

**SIIG ATA/133 Dual Channel RAID Mac PCI \$125.99**

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## Need memory?

Make your Mac run faster with a  
memory upgrade from OWC!

- Lifetime Advance Replacement Warranty
- Fully meets or even exceeds Apple specs
- UPS/FedEx AIR Delivery from \$4

## PowerMac G4 'Mirrored Door'

For PowerMac G4 'Mirrored Door' Dual  
867/1GHz/1.25GHz/1.42GHz, 1GHz, and all  
Xserve Models



PC2100 DDR 266MHz for Apple Power Mac G4  
'Mirrored Door' 1GHz & Dual 867MHz; Xserve  
1GHz and Dual 1GHz models

256MB ..... **\$39.99** 512MB ..... **\$69.99**

PC2700 DDR 333MHz for Apple Power Mac G4 'Mirrored Door'  
1GHz, Dual 867MHz / 1GHz / 1.25GHz / 1.42GHz; Xserve 1GHz /  
1.33GHz, Dual 1GHz / 1.33GHz models

256MB ..... **\$41.99** 512MB ..... **\$71.99**

## iMac G4/1GHz, PowerBook G4 12/17"



PC2100 DDR 266MHz SO-DIMM for  
PowerBook G4 12", iMac G4/1GHz models

256MB .. **\$39.95** 512MB .. **\$99.95**



PC2700 DDR 333MHz SO-DIMM for all  
PowerBook G4 12" & 17", iMac G4/1GHz

256MB .. **\$39.99** 512MB .. **\$119.99**

## Internal Mac Hard Drive Solutions

- Higher capacity for today's storage needs
- When you upgrade / replace with a new drive,  
it's just more storage - you get more performance  
with today's faster drives too!



## 3.5" ATA/IDE drives

For any PowerMac G3 or G4 model; any PowerMac  
equipped with an add-on PCI ATI controller (see below)

**40GB Maxtor only \$79.99!**

7200RPM, ATA/133, w/ 1yr

**80GB IBM 180GXP only \$99.95!**

7200RPM, 2MB Buffer, ATA/6, w/ 3yr

**120GB IBM 180GXP only \$129.99!**

7200RPM, 2MB Buffer, ATA/6, w/ 3yr

**80GB Seagate Barracuda 7200RPM \$109.95**

ATA/5, 2MB Buffer, w/ 1yr

**180GB Western Digital 7200RPM \$239.99**

ATA/6, 8MB Buffer, w/ 3yr

**250GB Maxtor 7200RPM \$399.95**

ATA/133, 8MB Buffer, w/ 3yr

Note: Above ATA Drives are fully compatible with all versions of  
vanilla ATA/IDE, ATA/33, ATA/66, ATA/100, ATA/133, EIDE, UDMA, Etc.  
Drives may be used with any Mac that has built in IDE/ATA or an  
added ATA/IDE controller (such as by SIIG, Acad, VST, or Sonnet).

Use ATA Drives in ANY PCI PowerMac! Don't have  
IDE/ATA built in or want a faster ATA/133 interface?  
OWC has the answers!

## Power Mac G4 AGP, iMac G3 350+, eMac

All PowerMac G4 Sawtooth / Graphics / Gigabit  
/ Digital Audio/ Quick Silver I&II Models  
including Dual Processor Equipped; iMac  
G3/350-700MHz Models, All eMac G4 Models



128MB PC133 CL3 / PC100 CL2 SDRAM ..... **\$29.99**

256MB PC133 CL3 / PC100 CL2 SDRAM ..... **\$39.99**

512MB PC133 CL3 / PC100 CL2 SDRAM ..... **\$79.99**

## iBooks, PowerBook G3/G4, iMac G4

All iBooks, all iMac G4 15" Models, iMac G4  
17" 800MHz, all PowerBook G4 15"  
Models (Titanium), PowerBook G3  
FireWire (yr2000/aka Pismo)



128MB PC133 CL3/PC100 CL2/PC66 SO-DIMM **\$29.99**

256MB PC133 CL3/PC100 CL2/PC66 SO-DIMM **\$39.99**

512MB PC133 CL3/PC100 CL2/PC66 SO-DIMM **\$84.99**

512MB PC133 CL3/PC100 CL2/PC66 SO-DIMM LP **\$109.99**

\* This module is compatible with PowerBook G3  
FireWire and listed iMac G4 Models ONLY.

## PowerMac G3, G4 'Yikes' PCI

All PowerMac G3 Beige, G3 Blue & White, G4  
PCI 'Yikes'



PC100 CL2/PC66 SDRAM

128MB **\$29.95**

256MB **\$38.95**

## 2.5" drives for Apple laptops!

Have up to 80GBs inside!

**20GB 4200RPM \$99.95!**

Fujitsu MHS2020AT, 2MB Buffer, w/ 3yr

**40GB 5400RPM \$149.99!**

IBM 40GNX, 8MB Buffer, w/ 3yr

**60GB 4200RPM \$199.99!**

Toshiba MK6021GAS, 2MB Buffer, w/ 3yr

Up to 80GB drives in stock from IBM/Hitachi, Fujitsu,  
and Toshiba! Call or visit [www.macsales.com](http://www.macsales.com)!

## Mercury Express 2.5" Portable Kits

Not sure what to do with the drive in your  
PowerBook/iBook now? Stick it in an OWC Mercury  
Express USB and/or FireWire Enclosure!



• FireWire + USB 2.1/1.1 Combo **\$69.95**

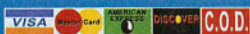
• FireWire only **\$49.95**

• USB 2.0/1.1 only **\$39.95**



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Competitive Prices

Quality Products

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## OWC Mercury Elite FireWire & USB 2.0 storage

The OWC Mercury Elite Series delivers Highly Reliable, High Performance Storage at the best possible prices! Under this text put the quotes and rating images. Add the MacSofa Quote and image as well.



### All OWC Mercury Elite solutions feature:

- Cool Blue LED Activity Indicator • Super quiet operation • Large 2MB and 8MB Data Buffer • Fully suitable for Digital Audio/Video • Ship pre-configured plug and play for Mac OS 8.5.1 - 9.2.2 & OS X • Intech Speedtools Mac Utility Software Included • Fully compatible with Windows & Unix OS versions that support FireWire • Full 2yr warranty

### Standard features for Mercury Elite FW400:

Custom Oxford911 Bridge Solution • Sustained Data Rates up to over 40 Megs/second • Two 6 Pin FireWire 1394A Ports • One 10" 6 Pin to 6 Pin FireWire connecting cable

### Standard features for Mercury Elite FW400 + USB 2/1.1:

Custom Oxford911 Bridge Solution • Sustained Data Rates up to over 40 Megs/second • Two 6 Pin FireWire 1394a FW400 Ports • One standard USB 2.0/1.1 Port • (1) 6 to 6 FireWire and (1) USB 2.0/1.1 10" connecting cables

### Standard Features for Mercury Elite Elite FW800 + USB:

Custom Oxford922 Bridge Solution • Sustained Data Rates up to over 55 Megs/second • Fully backward compatible to FW400 1394a • Two 9 Pin FireWire 1394b FW800 Ports • One 6 Pin FireWire 1394a FW400 Port • One standard USB 2.0/1.1 Port • (1) 9 to 9 pin FW800, (1) 6 to 6 pin FW400 and (1) USB 2.0/1.1 10" connecting cables

James Coates of the Chicago Tribune:

"Mac users likely will just break into smiles when they plug this high speed hard drive into the FireWire ports on their machines."

MyMac.com review 5 out of 5

Charles Carr from Computer Edge about buying an OWC Mercury drive: "You'll probably be happy you did." 4 out of 5. "The Elite is ideal for professionals and consumers who need convenient, portable storage for large amounts of data."



	FW400	FW400 + USB2.0/1.1	Elite FW800 + USB2.0/1.1
40GB 7200RPM 2MB	\$149.99	\$159.99	N/A
80GB 7200RPM 2MB	\$179.99	\$189.99	\$249.99
120GB 7200RPM 2MB	\$209.99	\$219.99	\$279.99
120GB 7200RPM 8MB	\$229.99	\$239.99	\$299.99
160GB 7200RPM 2MB	\$259.99	\$269.99	\$329.99
180GB 7200RPM 8MB	\$299.99	\$319.99	\$379.99
00GB 7200RPM 8MB	\$349.99	\$369.99	\$419.99
250GB 7200RPM 8MB	\$449.99	\$459.95	\$519.95
320GB 7200RPM 8MB	CALL	CALL	CALL

## OWC Mercury On-The-Go 2.5" FW400/USB

Up to 80 gigs that fits in a shirt pocket!



"It fits right in with the mac look and is super silent and easy to set-up - you couldn't ask for a better drive! Mercury Elite receives a perfect score!"

### All On-The-Go Drives Feature:

- Powered by FireWire Bus or Included AC Power Adapter • Cool Blue LED Activity Indicator • Super Quiet Operation • Large Data Buffer up to 16MB • Fully Suitable for Audio/Video
- Ship Pre-configured Plug and Play for Mac OS 8.5.1-9.2.2 & OS X • Intech Speedtools Mac Utility Software Included • Fully compatible with Windows & Unix OS versions that support FireWire • Weighs less than 12 Ounces! • All Cables, Carrying Case, and Full 1 Year Warranty Included



Drive may be powered by FireWire Bus or with included power adapter.

	FireWire	FW + USB 2.0/1.1
20GB 5400rpm 2MB	\$189.97	\$199.99
40GB 4200rpm 2MB	\$209.97	\$219.99
40GB 5400rpm 8MB	\$229.97	\$239.99
60GB 4200rpm 2MB	\$279.97	\$289.99
60GB 5400rpm 16MB	\$349.97	\$359.99
80GB 4200rpm 8MB	\$389.97	\$399.99

## OWC Mercury CD/CD-R/CD-RW - DVD/DVD-R/DVD-RW - FireWire + USB 2.0/1.1

### CD-R/RW External Solutions:



**Mercury 52x24x52x CD-R/RW FireWire Solution \$129.99**

**FireWire + USB 2.0/1.1 combo model \$139.99**

100% Apple iTunes Compatible, includes Roxio Toast Lite, 25 Pieces 52X 80 Min CD-R Media, All Cables, 1yr Warranty

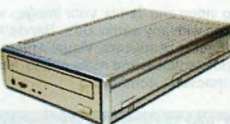
### DVD-R/RW & CD-R/RW 'SuperDrive' Solutions:



**Mercury DVR-105 DVD-R/RW + CD-R/RW 'SuperDrive' FireWire Solution \$349.99**

**FireWire + USB 2.0/1.1 combo model \$359.99**

100 Apple DVD Studio Pro & iTunes Compatible, includes CharisMac Discrite, 25 Pieces 52X CD-R + 5 Pieces DVD-R Media, All Cables, 1yr Warranty



Call or Visit [www.MacSales.com](http://www.MacSales.com) for our full FireWire/USB line which also includes:



## FireWire & USB add-on card from only \$19.99! Connect to thousands of new USB and FireWire Products!

### FEATURE PRODUCT

**MacAilly \$79.95**

2-port FW & 2-port USB 2.0/1.1 PCI Card

Save a slot and add the latest USB 2.0+1.1 and FireWire support to any Mac with a PCI Slot! Compatible with Apple OS 8.6-9.2.x, OS X.

### SPECIAL!

**MacAilly \$19.99**

3-port FireWire PCI Card

Add FireWire to ANY Mac with a PCI Slot! Plug and Play compatible with Apple OS 8.6 - 9.2.x and OS X

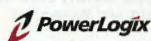


**Century 2-port PCMCIA FireWire Card \$29.97**

Add FireWire to any PowerBook G3 WallStreet or Lombard Model. Plug and Play compatible with OS 8.6-9.2.x, Apple OS X.

**MacAilly 2-port USB 1.1 PCI Card \$24.95**

Add USB to ANY Mac with a PCI slot, Plug and Play compatible with Apple OS 8.5.1 - 9.2.x and OS X



**PowerLogix RapidFire 2 Port USB 3 Port FireWire PCI Card \$59.95**

FireWire and/or USB lets you connect to the Apple iPod, Digital Cameras, Digital Camcorders, CD/DVD Burners, Hard Drive Storage, Keyboards, Mice, Scanners, Printers, and MUCH MORE! If your computer didn't come with one of these interfaces, they are easy to add so you too can plug and play USB & FireWire devices!





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### OWC Laptop Screen Protectors

## Protect your investment!

OWC Laptop Screen Protectors PREVENT marks on your PowerBook LCD Screen! FREE iKlear Apple Polish included for a 'Klean Start!'

**LSP WallStreet, Lombard,  
Pismo \$14.99**



**LSP - PowerBook G4  
15" 'Titanium' \$15.99**



**LSP for all iBooks,  
PowerBook G4 12" \$13.95**



Made in the USA of top quality, glove soft leather, OWC LSPs are both a durable and attractive solution to a known problem.

### PowerBook Accessories



**Roadtools  
Traveler CoolPad  
\$19.95**

For PowerBook, iBook, For  
PowerBook, iBook, ANY-  
Laptop! Available in Black or  
White. Rotates 360 degrees  
with ease.



**Roadtools  
Podium CoolPad  
\$29.95**

For PowerBook, iBook, ANY-  
Laptop! Available in Black or  
White



**OWC Mobility Bundle #4 for G4 PB \$54.95**

Includes TiG4 LSP, LapBottom, and RoadTools Podium (black) - Save 25%!



**OWC Mobility Bundle #6 for iBook \$49.95**

### PowerBooks CD/DVD Drives

**OWC PowerBook G4 CD+R/RW  
& DVD-ROM Internal Drive \$279.99**



**OWC PowerBook G4 CD+R/RW & DVD+R/RW  
Internal Drive \$449.99**

Take out existing PowerBook G4/400-500-550-667MHz CD-Rom  
or DVD-Rom Drive and upgrade to a faster drive that can  
BURN! New kit 100% compatible with all hardware/software,  
plug and play. 1 Year OWC Warranty.

### Mac PowerBook Batteries



**Apple PowerBook G3 Lombard  
(yr '99) / Pismo (yr '00) \$149.99**

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Create exciting music tracks with this virtual rack full of  
synths, loop players, samplers, mixers, effects, sound/loop  
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**Contour Design USB  
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\$99.95**



Excellent USB device for controlling your Mac Audio and  
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Connects to your Mac via USB and lets you read/write  
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### Keyboards and Mice



iOptiNet and iOptiNet Jr. Optical Scrolling Mice -  
5 color covers included

**MacAlly iOptiNet 3 Button USB \$31.99**

**MacAlly iOptiNet Jr. 3 button USB \$27.99**

Same as iOptiNet, but ideal for travel or smaller hands!



**OWC Apple 7 in 1 Bit Kit \$7.95**

Just what you need for installing memory  
or a hard drive and more for Apple  
Desktops, PowerBooks, iBooks/More

### Mac PRAM Batteries



**3.6V PRAM Replacement Battery \$5.99**

High-Capacity 3.6V Lithium Cell



**4.5V PRAM Replacement Battery \$7.99**

Standard Rayovac 4.5V Computer Pram Battery

### GriffinTech 'Cool Goodies'



**Griffin PowerMate USB \$44.95**  
Rotary Audio Controller and more!

**Griffin iMic USB**

**MicroPhone Adapter \$36.97**



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**iSkin iPod and Keyboard protectors only  
\$18.99 to \$19.99**





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### AGP Processor Upgrades



G4 AGP Graphics/Sawtooth



Digital Audio



G4 Cube



QuickSilver I



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PowerMac G4 now

Your PowerMac G4 made EXTREME!

**NEW OWC Mercury Extreme G4/1.2-1.33GHz  
with 2MB DDR L3 cache \$589.99**

- 700MHz, 800MHz, 1GHz models also available
- 3 year OWC warranty
- SPECIAL 30 day 100% money back guarantee!

For all PowerMac G4 AGP Models 100/133MHz Bus except Cube.  
Includes Quiet, High Efficiency Fan/Heatsink pre-attached for easy upgrade installation.



**Giga**  
DESIGNS



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**G4/1.25-1.33GHz 2MB DDR L3  
\$579.99**

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\$289.99**

PowerMac G4 AGP Models 100/133MHz Bus except  
Cube, 3 Year GigaDesign Warranty, Includes Heatsink  
and Fan factory attached for easy upgrade installation.

- See real world benchmarks at [www.macsales.com/upgrades](http://www.macsales.com/upgrades)
- \$\$\$ OWC gives cash back for your old processor too! \$\$\$
- Upgrading your PowerMac is Plug and Play simple - 100% compatible with Hardware/Software

**SONNET**  
SIMPLY FAST



**G4/1.2GHz 2MB DDR L3 \$649.99**  
**G4/1.0GHz 2MB DDR L3 \$549.99**  
**G4/800MHz 2MB DDR L3 \$339.95**

Crescendo/ST all feature 2MB of DDR L3 cache

Crescendo/ST G4 Upgrades are compatible with all AGP Equipped Power Mac G4 and G4 Cube Models\*. Sonnet is well known for their quality products and support with the Crescendo/ST being just one more example! Plug and Play for new Mac Speed!

\*Crescendo Installation Kit required for G4 CUBE ONLY - \$29.95

**PowerLogix**

**PowerLogix upgrades you to  
Dual Processor computing power!**

All feature 2MB L3 cache (2x1MB)

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**Dual 867MHz \$729.99**



PowerForce Dual G4

Available for most PowerMac G4 AGP 100/133MHz Bus Models except Cube. New heatsink included with upgrade. 2 Year PowerLogix Warranty.

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**NuPower Pismo G4/500MHz \$289.99** **newer technology**



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Upgrade your Wallstreet I/II G3 PowerBook (any speed) to the power of a G4/500MHz with Altivec! A big boost for OS X, OS 9 and all your applications. As an added bonus, you can also have up to 512MBs of memory now too!

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PowerMac G3-9600 G3/G4 Upgrades by Upgrade 73/75/76/85/86/95/9600s & Compatible PowerComputing Clones to a G3 or even up to a G4/800MHz Processor! Get the best performance from your older, but still VERY capable Mac with Apple OS 8.6 - 9.2.2; OS X 10.1 and higher! Fully compatible your hardware/software, an instant performance boost by replacing your existing processor card.

**Crescendo G3/450MHz 1MB 2:1 L2 only \$139.95**

**Crescendo G3/500MHz 1MB 2:1 L2 \$179.95**

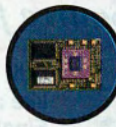
**Crescendo G4/700MHz 1MB 3:1 L3 \$297.99**

**Crescendo G4/800MHz 1MB 4:1 L3 \$395.99**



### OWC Mercury ZIF Upgrades

**OWC**



**G4/450MHz with 2:1 1024k L2 cache \$189.94**

**G4/500MHz with 2:1 1024k L2 cache \$259.94**

**G4/550MHz with 2.5:1 1024k L2 cache \$299.94**

Upgrades for PowerMac G3 Beige, G3 Blue & White, G4 'Yikes' PCI. High Quality, High-Performance, High-Reliability. OWC uses ONLY processors rated for the speed advertised, if not faster!



**G3/800MHz with 1:1 512k L2 cache \$297.99**

See all the upgrades we have for your specific Mac with the MyOWC Compatibility Guide:  
<http://eshop.macsales.com/MyOWC/index.cfm>

### Get High-Speed accelerated 2D/3D video from ATI



**Radeon 9000 MacEdition AGP w/64MB DDR for PowerMac G4 \$165.99**

Supports up to two displays simultaneously. Resolutions up to 2048x1535 supported!

**ATI Radeon 7000 MacEdition PCI w/32MB DDR for any PCI slot Mac \$119.99**

Features S-Video, VGA, and DVI ports; DVD playback, resolutions up to 2048x1535 supported!



## NEW Apple PowerBooks *Less Is More, AND More Is More*

### NEW! 12" Apple PowerBook G4

- Smallest, most affordable full-featured notebook
- High-resolution, 1024 x 768 TFT
- Lightweight durable aluminum alloy enclosure
- Slot-loading DVD/CD-RW drive
- 32MB nVIDIA GeForce4 420 Go graphics card
- Bluetooth built in, AirPort Extreme ready
- VGA, S-Video and composite video output
- Weighs only 4.6 pounds

### NEW! 17" Apple PowerBook G4

- The first notebook ever with a 17" TFT; 1440 x 900
- Backlit keyboard with ambient light sensors
- Lightweight durable aluminum alloy enclosure
- Slot-loading SuperDrive DVD-R/CD-RW
- 64MB nVIDIA GeForce4 440 Go graphics card
- Bluetooth and 54 Mbps AirPort Extreme built in
- NEW 800 Mbps FireWire and connections galore
- Weighs only 6.8 pounds

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SuperDrive! Call  
for details

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Loan starting at only **\$39** per month

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### 867MHz G4

- 12" TFT Display
- 256MB DDR Memory
- 40GB Hard Drive
- Combo DVD-ROM/CD-RW
- nVIDIA GeForce4 420 with 32MB DDR SDRAM

**\$1794<sup>98</sup>**

#169635

### 867MHz G4

- 15.2" TFT
- 256MB Memory
- 40GB Hard Drive
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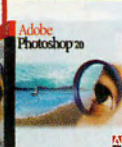


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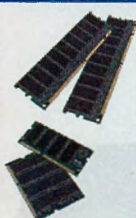
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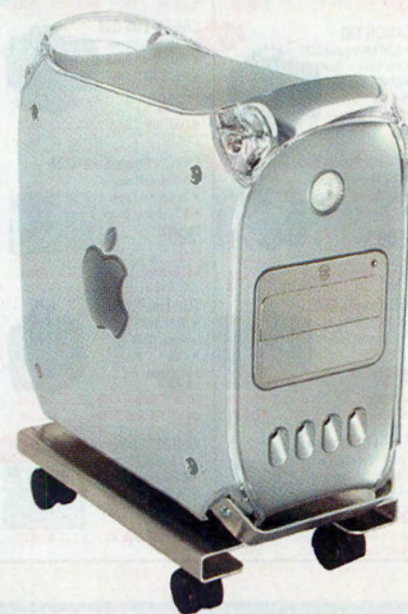
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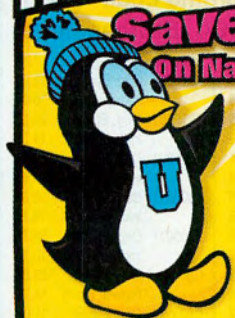
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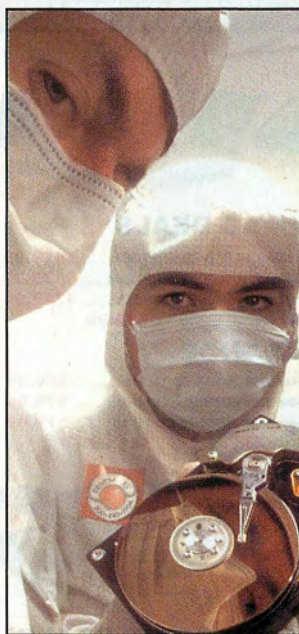
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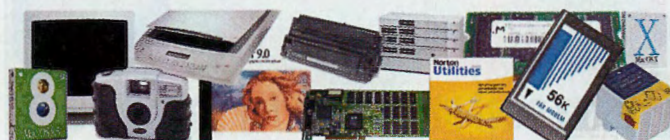
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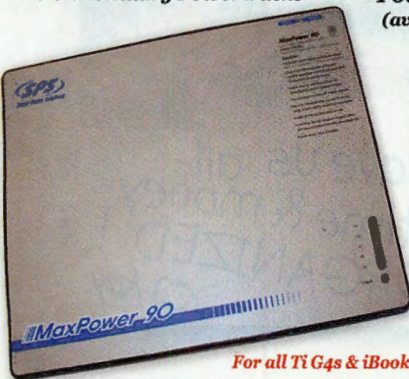
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# LETTERS

## DINO-MITE!

Where can I get that cool Godzilla USB hub pictured in the February 2003 issue (*Get Info*, Feb/03, p13)?—*Gary Kruse*

The FireWire Dino (\$74.95, [www.charismac.com](http://www.charismac.com)) should be available at the Charisma Web site by the time you read this.—*Max*



Godzilla's back—by popular demand.

## CONTEST WINNER CLEARS NAME

OK, OK, I'll come clean about how I got so close to guessing

the correct number of pages in the stack of books appearing in *MacAddict's* Books of Luck Contest (*Log Out*, Dec/02, p95). I already own about four or five of the books in the stack, so I counted those pages. Then I guessed the length of the other books. So no, I didn't break into the vault of books.—*Tim Ankorn*

We jokingly accused Tim of breaking into our offices to win the contest, which he obviously didn't, because only one person has ever gotten past our crocodile-filled moat and complex web of laser detection beams. And you know what happened to her...—*Max*

## SUSPICIOUS LETTER

I've been an avid reader of *MacAddict* for over four years. The magazine has improved

## READER ART

Artist: David M. Salmon

Occupation: Web

developer and student

**Statement:** The idea for this design project came to me when I received my Power Mac G4. I used cold-pressed poster board, tracing paper, carbon paper, about 20 *MacAddict* magazines, and black and white acrylic paint.

D. Salmon takes mixed media to the Macs.



into line.—*Ian Strom*

Rik, did you write this?—*Max*

## TARGET DISK BLUNDER

Hey Max! In March 2003's *Ask Us* (p60), Buz Zoller says, "You can use Target Disk Mode on any Mac with built-in FireWire, except for Blue-and-White G3s..." Well, I have a Blue-and-White and I have been using Target Disk Mode for more than three years. I just wanted to point this out in case other folks out there have ancient computers like mine.

—*Tom Knoedler*

We're passing the word along, thanks.—*Max*

## LOVE STORY

I picked up my new eMac at the UPS delivery hub. My heart was pounding when I saw the Apple logo. I hugged the box and said, "I love you. I have missed you since college. I will never give you up for adoption!" Then I heard a lot of laughing. I looked over to the right, where the UPS drivers were standing. Harrumph, they don't understand.—*Ron Gurba*

They often don't, Ron. They often don't.—*Max*

## HELP SAVE SQUELETRON!

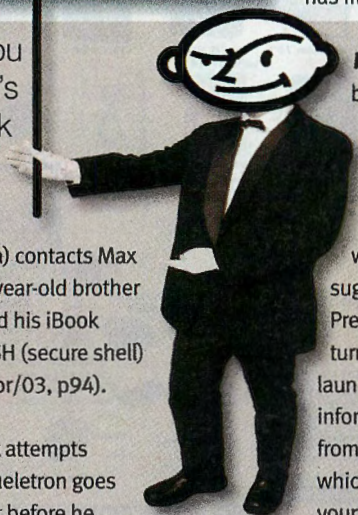
Max Needs You to Rescue Kid's Hijacked iBook

**January 2003:**

Squeleton (aka 13-year-old Kevin Garcia) contacts Max because his evil 15-year-old brother has remotely invaded his iBook with a mysterious SSH (secure shell) protocol (*Log Out*, Apr/03, p94).

**February 2003:** Max attempts reconnaissance. Squeleton goes underground but not before he reveals that he is in fact the root user. There is hope.

**March 2003:** Sympathetic reader Raviin Patel writes, "My thoughts and prayers are with Squeleton." Max holds a sparsely attended candlelight vigil.



**March 2003:** Squeleton resurfaces, blames the missed communication on Microsoft Hotmail, and renews his request for aid.

**April 2003:** Max confers with IT experts, who find Squeleton's dilemma curious. They suggest the following: Plan A: Go to System Preferences > Sharing > Services. Click Stop to turn off SSH Remote Login. Plan B: If that fails, launch the Terminal and type **who** to see specific information about who's accessing your Mac and from where. Plan C: In the Terminal, type **ps -aux**, which gives you a list of the processes running on your system. Look for suspect processes like snoop or a password checker.

If you have any advice for Squeleton, send an email message to [letters@macaddict.com](mailto:letters@macaddict.com) with the subject line "Saving Squeleton." We'll make sure he gets your note, and we'll keep you posted on this continuing saga.



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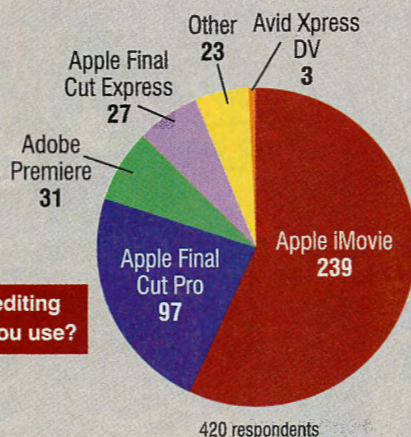
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**Q** What do you look for  
in an LCD display?

- Good physical design
- Low cost
- Brightness
- Ability to play fast-action video and games

**Q** What do you look for  
in a mate?

- Good physical design
- Low cost
- Brightness
- Ability to play fast-action video and games

To answer, click Reader Poll at [www.macaddict.com](http://www.macaddict.com) before May 10, 2003. See the August 2003 issue for the results. Check [www.macaddict.com](http://www.macaddict.com) for a new poll each month.

## ESP

I would love to read an article on how to turn your Mac into the ultimate home-entertainment system. —*Roni Ooh, a Twilight Zone moment. A few months ago our ears started burning, so we instinctively published "Kick Back with Your Mac," an article on making the Mac the soul of your entertainment center (Nov/02, p30). —Max*

## WINNER!

Results of Max TV  
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**Deadline for entry: June 30, 2003**

Contest results will appear in our October  
2003 issue. One entry per contestant.

## QUICKBOOKS CONTEST ENTRY FORM

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(yet still plausible) business idea.

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The judges will be MacAddict editors, and they will base their decision on the following equally weighted criteria: 50 percent humor and 50 percent plausibility. All entries must be received no later than June 30, 2003, with the winner announced on or around October 2003. By entering this contest, you agree that Future Network USA may use your name, likeness, and Web site for promotional purposes without further payment. All prizes will be awarded and no minimum number of entries is required. Prizes won by minors will be awarded to their parents or legal guardians. Future Network USA is not responsible for damages or expenses the winners might incur as a result of this contest or the receipt of a prize, and winners are responsible for income taxes based on the value of the prize received. A list of winners may also be obtained by sending a stamped, self-addressed envelope to Future Network USA c/o MacAddict contest, 150 North Hill Dr., Brisbane, CA 94005. This contest is limited to residents of the United States. No purchase necessary; void in Arizona, Maryland, Vermont, Puerto Rico, and where prohibited by law.



**W**e recently received the following press release in our offices and wanted to pass along the news to you. You heard it here first!



Ah, home sweet home.

## FOR IMMEDIATE RELEASE

### Two New Sims Expansion Packs Announced

Austin, Texas, May 20, 2003—Games developer Perspyr has announced the upcoming release of two expansion packs set to rival The Sims' official add-ons. Due out later this year, the competitors to the popular Sims franchise will include **The Sims Fall on Hard Times** and **The Sims Celebrity Edition**.

"The Sims does a stellar job of reflecting real life!" says Cher Leader, a representative for Perspyr. "But with all that's been going on

**"...we feel it's our job to depict all walks of life! Even the grittier ones!"**

in the world, the current Sims franchise **no longer accurately reflects** contemporary life! We think these titles do a better job of making The Sims experience relate to the world as it exists nowadays!"

There's a new 'hood coming to The Sims this summer! The Sims Fall on Hard Times gives your Sims the opportunity to live in the **neighborhood crack house**. Players must ensure that Sims' addiction levels remain high and that there's a ready supply

of pipes and paraphernalia to keep crack-house residents satisfied. Other tasks include putting **bars on doors and windows**, competing with the meth (or "crank") lab next door for business, seeking out hiding places in case of **police raids**, and convincing paranoid cohabitants that you're not CIA.

The Sims Fall on Hard Times also introduces several new career paths, including Dealer, Mugger, Bag Lady, Hooker, and **Downward-Spiraling Diva**. In another Sims first, the Diva track is the only career in which a player can actually get demoted and lose Charisma points.

"We're really proud of this title!" says Leader. "Now that the government has pointed to **video games** as a major influencing factor in kids' lives, we feel it's our job to depict all walks of life! Even the grittier ones!"

Later this year Perspyr will release The Sims Celebrity Edition. Catapulting off the popularity of **reality-TV shows**—like *Celebrity Mole*, *The Surreal Life*, and *I'm a Celebrity, Get Me Out of Here!*—The Sims Celebrity Edition allows you to play one of eight celebrity

Sims living in a house together. Featured celebrities include Michael Moore, Charo, Tina Yothers, Adrian Zmed, John Ashcroft, Diana Ross, Tori Spelling, and Corey Feldman.

Players must manage the tenuous relationships in the house. Gameplay goals include getting Charo and John Ashcroft to **freak-dance** together, getting Tina Yothers and Corey Feldman to find a love connection, and building the relationship between John Ashcroft and Michael Moore to where they **feel comfortable peeing** in front of each other.

In a recent press conference to promote the game, a spokesman for Tori Spelling said, "Players should note that since this game's completion, **Spelling's physique** has been substantially altered. A patch will be available soon!"

When asked how she felt about starring in a game with former *Dance Fever* host Adrian Zmed, Charo screeched: **"Coochi Coochi!"**

John Ashcroft added: "I'm pleased to be a part of **The Sims Sunday Bible Study**. That's the name of this game, right?"

Games will be priced at \$29.95 and will be available online later this year.



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